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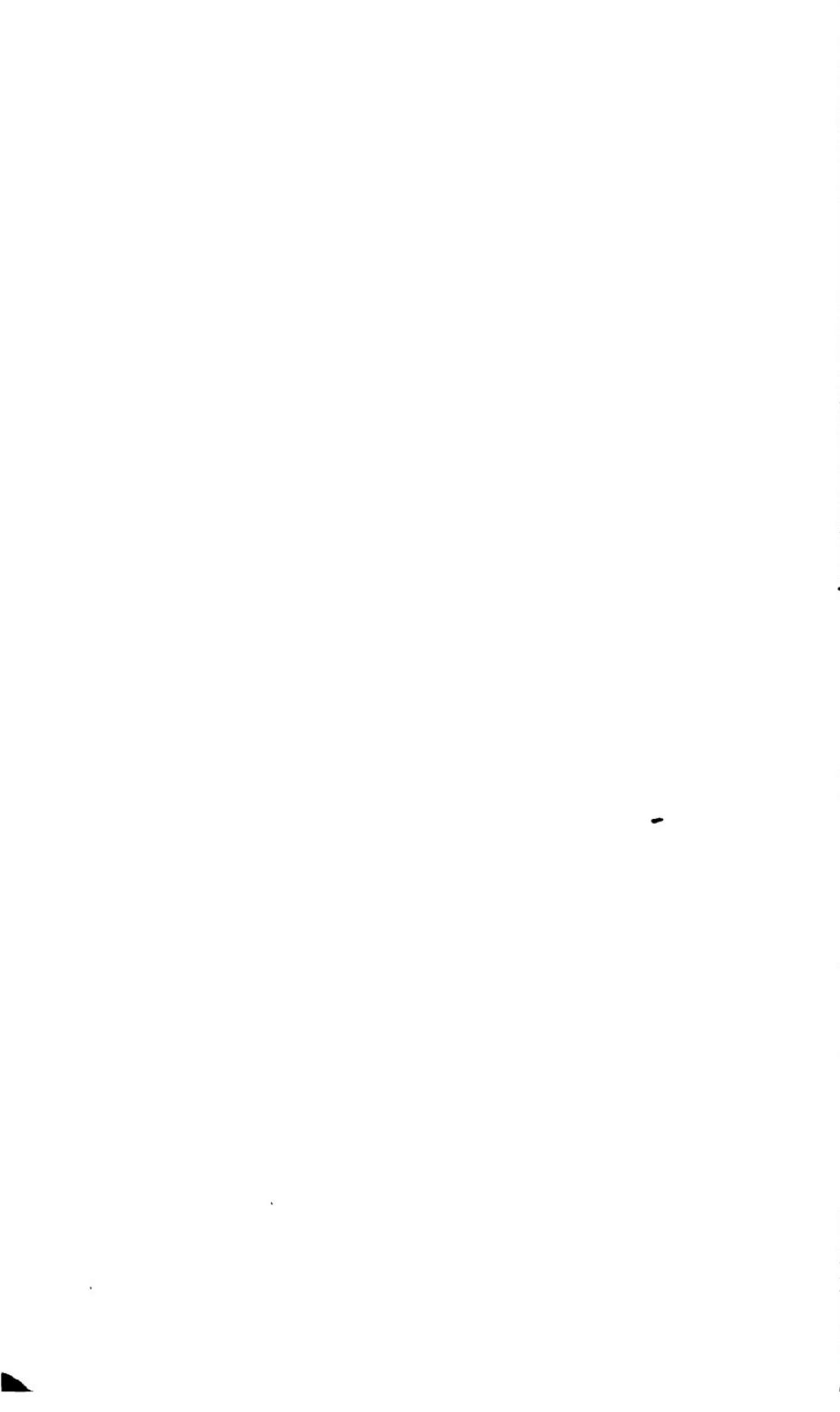
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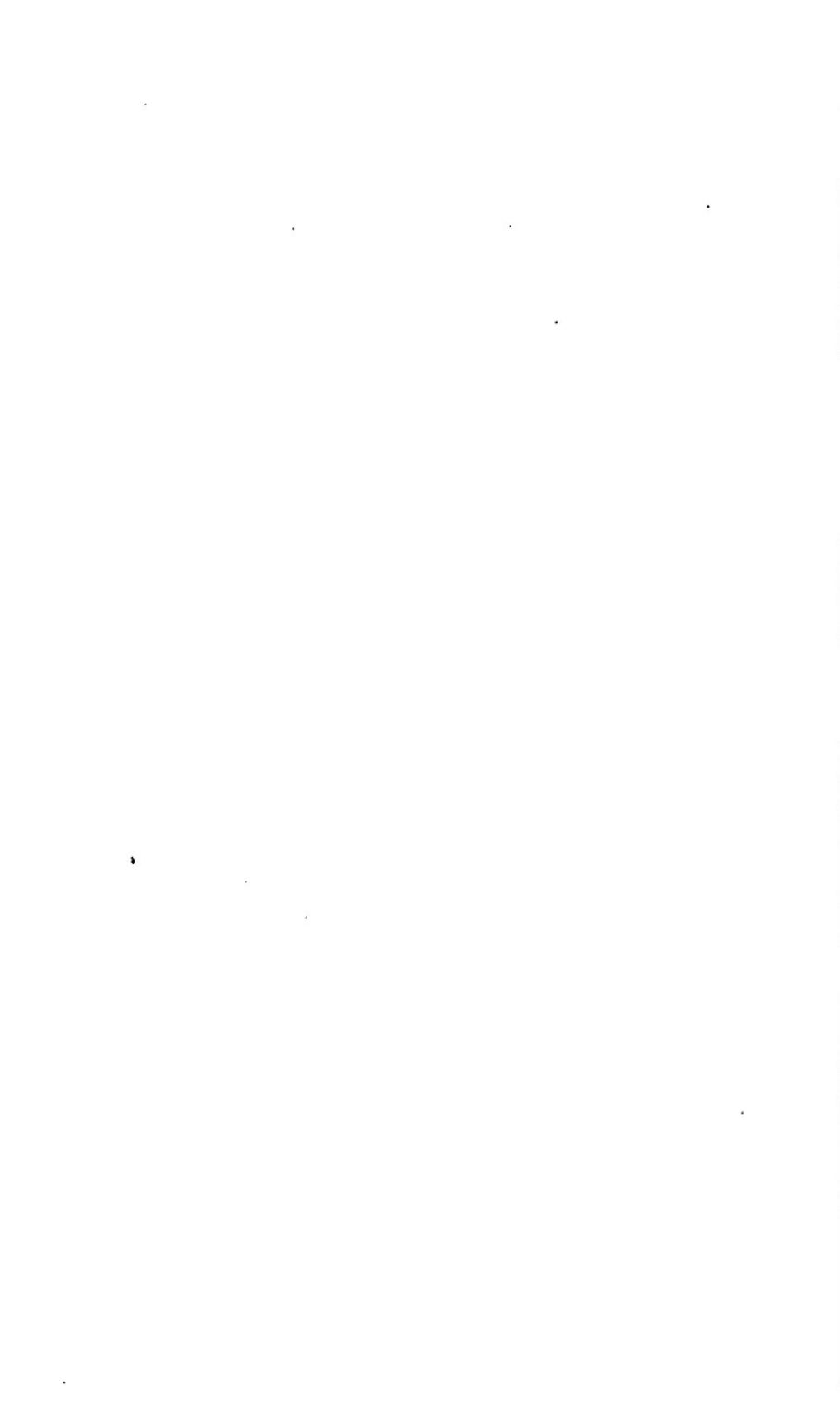
PRACTICAL TREATISE

ON

INFLAMMATION, ULCERATION, AND INDURATION

OF THE

NECK OF THE UTERUS.



A

PRACTICAL TREATISE
ON
INFLAMMATION, ULCERATION, & INDURATION
OF THE
NECK OF THE UTERUS:
WITH
REMARKS ON THE VALUE OF LEUCORRHEA & PROLAPSUS UTERI
AS SYMPTOMS OF UTERINE DISEASE.

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WHOSE NAMES ARE OFTEN MENTIONED IN THE FOLLOWING PAGES,

THIS ATTEMPT

TO ELUCIDATE THE PATHOLOGY AND TREATMENT
OF A MOST IMPORTANT AND INTERESTING BRANCH OF MEDICAL
KNOWLEDGE,

Is gratefully Dedicated,

AS A FEEBLE PROOF OF THE GRATITUDE OF
THE AUTHOR,
FOR THE MANY FAVOURS CONFERRED UPON HIM DURING HIS
RESIDENCE IN THE ABOVE HOSPITALS.

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P R E F A C E.

DURING my connexion with the Paris hospitals, which lasted seven years, three as a pupil and four as a resident medical functionary, owing partly to choice and partly to fortuitous circumstances, I was the assistant of several of the physicians and surgeons of that capital who have paid the greatest attention to uterine pathology, and my attention was thus early directed to this interesting department of medical knowledge. As I generally availed myself of the privilege granted to Paris "internes" by the hospital authorities, to take private clinical pupils with them on visiting the patients entrusted to their care, I was compelled to analyze carefully the morbid phenomena of every case, so as to satisfy the inquiring disposition of men of mature age and understanding, whom alone I could take with me, owing to

the peculiar nature of uterine maladies. I was thus soon led to perceive, that however carefully the field of uterine pathology had been investigated, there still remained much to be elucidated. One point more especially attracted my attention —viz., the nature, causes, and therapeutics of ulceration and induration of the neck of the uterus, the commonest of all uterine lesions.

On referring to the most esteemed works on uterine diseases, both French and English, I found that the data which the former contained respecting this malady were insufficient to account for the numerous modifications which I daily witnessed, whilst the latter were nearly completely barren on the subject. After much doubt and uncertainty, I at length arrived at views which appeared to me to explain much of that which had heretofore been obscure. It was not, however, until the experience of one year and of one hospital had been corrected by that of other years and of other hospitals, that my ideas took the direction which is presented in the present work.

To render this statement intelligible to those who are unacquainted with the medical institutions of Paris, I may mention that that city is re-

markable for the extent and number of its *special* hospitals. There are immense separate establishments for the young, the adult, and the aged, as also for the syphilitic, the scrofulous, and those affected with skin diseases. Into these the house physicians and the house surgeons (who hold their appointments for four years) are successively draughted, so that in the six or seven years during which the Paris "interne's" connexion with the hospitals lasts, at first, as a pupil, and subsequently as a resident functionary, disease is studied on a large scale, in very varied fields. These successive changes of the point of view from which pathology is seen, I found of the greatest possible use. Uterine disease is not the same at St. Lazare, where five hundred female prostitutes affected principally with primary syphilis are treated, as it is at the Hospital St. Louis, the receptacle for cutaneous syphilis and scrofula, or as at the general hospitals, where non-syphilitic patients are received. Even in the latter, great differences exist; some—such as La Pitié—being near La Maternité, where several thousand women are delivered annually, receive many patients recently discharged from that hospital; others—such as La Charité and the

Hôtel Dieu—depend more on the general population; whilst in the Salprière, which contains three thousand five hundred women above sixty years of age, and several hundred incurable cancerous patients, the uterine field again changes. I do not mean to say that the same forms of disease are not met with in these various establishments, for such an assertion would be erroneous; but that the proportions in which they show themselves, and often, the modes of their manifestation, differ considerably.

An outline of my views on the subject of which I am about to treat, was hastily sketched and presented to the Faculty of Medicine of Paris, in the form of a thesis, on my graduating at that University. The present more elaborate essay was published, in parts, in the ‘Lancet’ of this year; and as I think the facts and views which it contains are of importance, I now reproduce them in a more extended and complete form. Under such circumstances I cannot, certainly, be reproached with not having matured my opinions. In the first instance, they were formed after I had long enjoyed very great opportunities for seeing uterine disease. They have since been considered over and over again, and

have stood the test of several years' additional experience.

Some of the views which I bring forward will, I believe, be found original,—at least, if I can trust the results of my bibliographical researches. I have also many details of great interest and importance to present, with reference to the various modes of *treatment* in inflammation, ulceration, and induration of the uterine neck adopted by the Paris physicians and surgeons—details which will, I believe, be new to most of my readers. Having carefully watched, during a great length of time, the effects of the treatment followed by the eminent Parisian practitioners, with whom the knowledge of this form of disease recently originated, and that under the most favourable circumstances—as their pupil or assistant—I have been able, I hope, to form a correct estimate of the comparative value of the different agents which they employ. I have thus, I am also inclined to think, learnt how to avoid the exclusiveness which most of them show in the choice of their therapeutic agents.

In Paris hospital practice, the objections which exist in England to examination by the *toucher* or by the speculum, either are not met with, or

are not allowed by those physicians and surgeons, who pay special attention to uterine disease ; consequently, little more difficulty is experienced in appreciating, by their means, the symptoms furnished by the uterine organs, than in resorting to any usual means of investigation in diseases of other parts of the economy. As a matter of course, however, no examination of the kind is ever attempted when the hymen is found entire.

This being the case, the opportunities for investigating the state of the internal organs of generation in females presenting uterine symptoms must necessarily be much greater than in England, where no examination, even of a married person, is attempted by the most experienced practitioners, unless there be very serious reason for such a step, and very frequently not even then. That this laudable sense of propriety is, however, often carried much too far by the members of the medical profession with us, is well known to all who specially study uterine pathology. I might mention numerous illustrations of this fact. One alone, however, will suffice to show how frequently examination is neglected by well-informed practitioners, from false delicacy on their part and not on that of their patients.

A few months ago, I was consulted by an unmarried female, who had presented for eight years, not a few only, but *all* the symptoms of uterine polypus. During this period she had been attended, for weeks and months at a time, by five or six different medical gentlemen, of undoubted talent and ability, not one of whom ever proposed an examination, although, from the intensity of the symptoms, they *must* have suspected the nature of her disease. This person has repeatedly told me that she would at any time have submitted to an examination had she been requested, so great were her sufferings. Delicacy carried to such an extent becomes absolutely criminal, and, moreover, reflects discredit on the profession, the patients always attributing to ignorance, as in the case alluded to, the excessive scruples of their medical attendants.

I have been often told that females in this country will not submit to treatment when afflicted with uterine disease. I can only say that I have not found this to be the case in my own practice. I have met with many objections, but never with a decided refusal, when I have stated that an examination was IMPERATIVELY NECESSARY. I am, indeed, convinced that our

countrywomen, when suffering under these distressing diseases, would always submit to an examination—conducted with a due regard to their feelings—were the absolute necessity of such a step properly enforced by their medical attendant. Health and life are too valuable for every possible sacrifice not to be made when they are endangered.

It may be as well to mention here, that the cases which are interspersed throughout this work are not given to *substantiate* my opinions, but merely to *illustrate* them. There is nothing more tedious to a reader than the perusal of a long series of cases, all reproducing the same phenomena ; and when the doctrinal points brought forward are deduced from plain everyday facts,—which are not generally appreciated, merely because they are not sought for,—it is quite unnecessary to parade a long array of cases in order to substantiate them.

9, Cambridge-square, Hyde-park,
June 18th, 1845.

A PRACTICAL TREATISE
ON
INFLAMMATION, ULCERATION, AND INDURATION
OF THE
NECK OF THE UTERUS.

INFLAMMATION of the neck of the uterus, along with its sequelæ, ulceration and induration, is an exceedingly common affection; much more so, indeed, than any other uterine disease, a fact of which English practitioners appear to be quite unconscious. It is the principal cause, also, of several morbid states which are generally, if not always, studied independently of any such origin; as, for instance, prolapsus of the uterus and leucorrhœa. With reference to leucorrhœa, indeed, I have ascertained, to my complete satisfaction — firstly, that, setting aside cancerous disease, in the very great majority of adult females who have been exposed to sexual intercourse, a confirmed leucorrhœal discharge, whatever may

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be its nature, is accompanied by inflammation of the neck of the uterus; secondly, that this inflammation seldom exists long without producing ulceration; and, thirdly, that ulceration is *always* accompanied by more or less engorgement (swelling, with or without induration) of the substance of the uterine neck.

The causes, frequency, extent, and nature of the inflammatory disease of the uterine neck, vary very considerably, according to the *functional* state of the uterus. Following up this view, I admit a fundamental and most important distinction between the inflammations and ulcerations which occur in the uterine neck of females who *have never conceived*, and those which take place in the same region in females who *have conceived*—that is, who have either miscarried or borne children. This constitutes a practical division which ought never to be lost sight of. We have, in addition, syphilitic ulcerations, which may occur either in women who have or have not borne children, varying accordingly; and, lastly, malignant or cancerous ulcerations. I shall now examine the pathology of each of these four kinds of inflammation and ulceration, but more especially of the first three.

CHAPTER I.

INFLAMMATION, ULCERATION, AND INDURATION OF THE CERVIX UTERI IN WOMEN WHO HAVE NOT BORNE CHILDREN.

*Structure of the cervix uteri.—The disease in virgins ;
in married women.—Causes, symptoms, progress.
—Illustrative cases.*

IN order to appreciate the morbid changes, the result of inflammation, which take place in the cervix uteri, it is necessary to keep in mind the peculiar structure of that organ. It is now a well-known anatomical fact, that the cervix uteri contains a small amount of cellular tissue, of which the uterus itself is totally devoid,* that it is much *more vascular* than the other regions of the uterus, and that it also presents but few muscular fibres. Dr. Ashwell, in his recent valuable treatise on Diseases of Women, even states that he has

* See "Lancet," Sept. 7th, 1844, Researches of M. Jobert on the Structure of the Uterus.

not been able to trace any muscular tissue in its structure, (page 266;) but I have distinctly seen circular muscular fibres, and the termination of longitudinal ones, in the cervix uteri of a woman who died in the eighth month of pregnancy; and M. Jobert, whose researches I have above alluded to, states that he has met, in the entire animal creation, both with circular decussating and longitudinal muscular fibres in the uterine neck. These anatomical facts are important, as they account for its greater susceptibility to inflammatory engorgement than other parts of the uterus.

The size and length of the cervix uteri vary considerably in different females—a fact which must necessarily be taken into consideration if we wish to appreciate the existence or non-existence of engorgement, or morbid increased volume, of the organ. Indeed, these physiological variations are so great, that were we to allow ourselves to be guided by size alone, as appreciated by the toucher or the speculum, we should, undoubtedly, be often misled, and induced to suppose that disease existed when it did not. In reality, a very voluminous healthy cervix uteri is perfectly

compatible with entire freedom even from uneasy sensation. The difference in length of that part of the cervix uteri which projects into the vaginal cavity, is evidently owing, principally, to the vagina being implanted, as it were, at different heights on the cervix, so that in some females it is merely a few lines in length, whereas in others it is an inch and a half, or more. This physiological elongation of the cervix uteri may, it appears, be carried to such an extent, that its free extremity reaches the orifice of the vulva. Dr. Heming, in his essays on uterine diseases, lately published in "The Lancet," mentions several curious cases of the kind. I never recollect having met with a cervix uteri, in its physiological state, of more than an inch and a half or two inches in length.

In the healthy condition, the cervix uteri is perfectly soft and smooth. On being pressed by the finger, no hardness or resistance, indicating condensation of tissue, is felt. There is at the same time a certain degree of elasticity about it, the varying degree of which indicates general or local congestion, or atony of the uterine system—states which, however, as Dr. Ashwell justly remarks,

can only be appreciated by long habit. In the healthy condition, the surface of the neck of the uterus is generally unctuous to the touch. The layer of mucus by which it is then covered accounts for this very characteristic sensation. There is also complete absence of pain on pressure. In examining the cervix by the toucher, it is advisable to appreciate carefully the state of the entrance to its cavity, as slight local induration existing on or within the margin of the lips might otherwise escape notice. The pulp of the finger should be brought successively to bear on each part of the surface of the organ, above, below, and on each side, which may be easily accomplished. Not only does this mode of examination contribute to render our sensations of density and smoothness more perfect, but it also enables us to judge of the size and freedom from adhesions of the body of the uterus itself. In the unimpregnated state, and when not morbidly enlarged, the body of the uterus moves readily on pressure being made on the neck; pressure thus applied acting as on one extremity of a lever—that is, raising the other in the opposite direction. If these facts respecting the healthy uterine neck are borne in mind,

the detection of disease becomes comparatively easy.

The opportunities of investigation which I have had, as a matter of course, not extending to virgin females, I am not able to state whether inflammation of the cervix is frequent or not with them. I am, however, inclined to think that it is not, and that when it does exist, either as a complication of general metritis or as a local affection, it nearly always gives way spontaneously. When the mucous membrane of the vagina is inflamed, with virgins, that of the uterine cervix may participate, no doubt, in the inflammation, and ulceration may follow. The numerous mucous follicles, also, which exist on the cervix, may occasionally inflame and ulcerate, like those of the mouth. But, in both these cases, the inflammation not being kept up or increased by mechanical irritation, it is probable that, generally speaking, it soon subsides, and that the ulcerations heal of themselves, as is the case with aphthæ in the mouth. Thence it is, most likely, that the symptoms indicating severe inflammation and ulceration of the cervix uteri are scarcely ever met with in them.

In married females, on the contrary, if any slight irritation of the internal genital organs exists, the cervix uteri is certain to suffer. It is continually contunded and bruised, and the irritation passes on to inflammation and to ulceration; which latter does not heal, but becomes permanent, owing to the same circumstance. Thus, aphthous inflammations of the follicles of the cervix, or slight attacks of vaginitis,—nearly innocuous in virgins,—are frequently the primary cause of inflammation and ulceration of the cervix in women exposed to sexual intercourse, whom, for the sake of brevity, I shall henceforth call married females. In many instances, no doubt, sexual intercourse will alone give rise to the disease. This being the case, we ought not to be surprised to find inflammation and ulceration of the cervix nearly always present when a confirmed mucoso-purulent (leucorrhœal) discharge exists in married women, even if they have never borne children. In these cases, the leucorrhœal discharge may be merely the result and the symptom of the ulceration of the cervix; or the inflammation and ulceration may have

superadded themselves to ordinary leucorrhœa, aggravating and perpetuating it.

SYMPTOMS.—When inflammation attacks the cervix uteri in women who have not conceived, it is nearly always confined to the mucous membrane, the deeper structures seldom becoming implicated, except in cases of general metritis. The inflammation may co-exist with general vaginitis, as is usually the case in gonorrhœa ; it may be confined to the uterine neck, and to that part of the vaginal cavity which is in contact with it—viz., the superior fourth or fifth ; or it may be limited to the orifice of the os uteri. The leucorrhœal discharge may be a prominent symptom, or it may be absent, or nearly so ; which is the case when the inflammation is very limited, the mucoso-purulent secretion being then but slight, and lost in the vagina. This generally occurs when the inflammation is the result of sexual communication. There are, however, other symptoms present to guide us in our diagnosis. The patient complains of pain in the loins, and sometimes, of deeply-situated pain in the hypogastric region, behind the pubis, and, a most important symptom, intercourse is painful. This fact alone may lead us to suspect the exist-

ence of disease. Sometimes there is a vivid perception of heat at the superior portion of the vagina. There is no sensation of weight, heaviness, or bearing down, except in extreme cases, in which the malady has been long neglected.

Toucher.—On examining by the toucher, the neck of the uterus is found hotter than the lower part of the vagina; it has lost its unctuous, greasy feel; its volume is more or less increased, as also its elasticity, owing to its being more or less congested. Still there is no general or deep-seated induration of its tissue. The surface, likewise, is smooth and unresisting, unless ulceration has set in. When this is the case, it is at the orifice of the uterine cavity that the ulceration commonly begins, and from that region that it spreads; owing, no doubt, to the greater tenuity and delicacy of the mucous membrane. Pathologists generally state that the ulceration may be recognised, by its producing the sensation that a velvety surface would offer when the finger is passed lightly over it. Finding, however, that this peculiar sensation is so difficult to appreciate in this form of the disease, that those who rely upon it alone must be as often wrong as right, I

have endeavoured to discover a more correct guide, and have ascertained that ulceration of the mucous surface, however limited, almost invariably gives rise to slight induration of the tissue underneath, which induration is very perceptible to the touch. In the form of ulceration that we are now examining, the induration to which I allude is quite superficial, not extending to the central tissue of the uterine neck. It is merely a thickening of the ulcerated mucous membrane, and of the sub-cellular tissue, most perceptible at the circumference of the ulceration; yet it is easily appreciated by the finger of one who is accustomed to look for it, and to him is a valuable symptom. This superficial induration is generally felt most distinctly at the edge of the uterine lips, where the mucous membrane passes into the cavity of the neck, and where, consequently, two mucous thicknesses are approximated by the folding of the membrane. Although I have found this symptom of great assistance in the diagnosis of ulcerations, I must confess, nevertheless, that it is not infallible. In the very first stage of ulceration, induration may not yet exist, whilst, on the other hand, the ulceration may heal, and the

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superficial induration remain for a few days. When the inflammatory induration extends to the entire substance of the cervix, as it generally does if the ulceration exists in women who have had children, the superficial induration is necessarily lost in the general hardness. Pressure on the inflamed and ulcerated cervix will often, not always, occasion slight pain, which is never the case in the healthy state.

There being, thus, great difficulty in arriving at a satisfactory diagnosis by means of the toucher alone, it is generally necessary to resort to the speculum, in order to ascertain correctly the true state of things, its use being calculated to remove all doubts as to the state of the parts. This remark applies not only to those who are unaccustomed to the treatment of uterine diseases, but even to those whose touch has been fully educated.

Speculum.—On examination by the speculum, a certain quantity of mucoso-purulent matter is always found at the superior region of the vagina, even when the lining membrane of that organ is not inflamed; the cervix uteri is generally increased in size, but seldom so much so as not to

be admitted into the cavity of an ordinary sized conical speculum, the one I generally use, and by far the most convenient and the least painful to the patient. The tumefaction is mostly greatest on the upper lip, which is the larger one of the two in the healthy condition; it is therefore often necessary, in order to expose the orifice of the os, to raise the speculum towards the pubis, and by thus slightly pressing with the superior edge of the instrument on the anterior lip, to push it back, and allow the inferior one to enter its cavity. Even if the cervix uteri is too large to be admitted at once into the speculum, by thus alternately depressing its different parts the entire organ may successively be brought fairly into view. When inflamed, the tumefied cervix presents a more or less intense red, glistening hue, instead of the pale, dull, whitish colour, which is natural to it. On its surface may frequently be seen small white or red vesicular, or papular, elevations, the result of distention of the mucous follicles, or of their hypertrophy. Different forms of inflammation have been admitted by some writers, founded on this appearance, but without any practical utility whatever. When the mucous

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membrane is ulcerated, the glossy appearance of the membranous surface is lost, and a number of vascular granulations, of a vivid red hue, are seen covering the ulcerated region, after the mucus has been wiped away with a pledge of lint—a necessary precaution. Sometimes the ulcerated surface appears raised above the adjacent level, whilst occasionally, on the contrary, it appears depressed. When the ulceration is at the entrance of the os uteri it is often difficult to discover, unless the uterine lips be slightly separated. There is generally a mass of semi-transparent mucus occupying the cavity of the os uteri. The ulceration may be so superficial and slight as to be scarcely perceptible, or extend over a considerable portion of the cervix. In many cases, the pressure of the edge of the speculum, or even of the pledge with which the mucus is wiped off, occasions a slight oozing of blood from the abraded or ulcerated surface. This also frequently occurs when patients thus affected expose themselves to intercourse—a fact of which they themselves are often cognizant. Menstruation is generally more painful than in the healthy state, owing to the temporary congestion of the uterus increasing the inflammatory irritation of the

cervix. Indeed, the occurrence of the various symptoms of painful and difficult menstruation, when coupled with a leucorrhœal discharge, may be considered, in most cases, as pathognomonic of inflammation and ulceration of the cervix. Occasionally, slight irritation of the urinary organs is present, giving rise to frequent desire to urinate. The annoyance and distress of mind which the local symptoms sometimes produce, coupled with the leucorrhœal discharge, when it is abundant, may react more or less on the general health, and give rise to dyspepsia, palpitation, general weakness, &c.

Such are the symptoms which ulceration of the cervix and os uteri usually occasion in the unimpregnated female. The inflammation, ulceration, and induration, are nearly always superficial — limited to the mucous membrane. The cervix becomes tumefied, congested, but remains soft and spongy. There is scarcely ever the deep-seated, solid engorgement of the cervix, which is so often met with as the result of the same lesions in females who have borne children, and which is occasioned by inflammation and effusion of lymph in the central tissues of the neck, giving rise to the peculiarly distressing

bearing-down pains experienced by persons thus afflicted. The reason is evident. Although subject to the periodical menstrual congestion, the uterus is, until impregnated, in a dormant condition, as it were. Its mucous membrane is a mere film, and its proper tissue, which we have followed into the neck, is in an elementary fibromuscular state, very sparingly supplied with blood, and possessing a very subdued vitality. It is owing to these anatomical and physiological circumstances, in my opinion, that the inflammations and ulcerations of the cervix uteri *seldom* assume the more serious form which I shall have to describe as that which is frequently met with in women who have borne children. I shall conclude the above brief account of this species of uterine inflammation, by the narration of two cases, selected from many, which will admirably illustrate the facts that I have above stated.

CASE I.

Disease rather severe.—Cause, marriage.—Cure perfect.

At the beginning of 1844, a gentleman, who had been married about four months, requested me to see his lady, who had, he stated, been suffering for

some time. The lady, four-and-twenty years of age, was apparently in the enjoyment of robust health, the various functions being all accomplished with great regularity. On inquiring minutely, however, into her state, I found that she had experienced pains in the loins nearly ever since her marriage ; that these pains had gradually increased, had lately been accompanied by slight pain behind the pelvis, and by a deep-seated sensation of heat in the same region ; that intercourse, at first unattended by pain, had, a few weeks after marriage, become painful, and was then unbearable, from the last-mentioned cause. There was no perceptible leucorrhœal discharge. Being convinced that inflammation and ulceration of the uterine neck were the cause of these symptoms, I obtained the consent of the parties to an examination.

On practising the toucher, I found increased heat in the superior region of the vagina, and a large tumefied, but soft and pulpy, cervix uteri. The anterior lip was evidently much more tumefied than the posterior ; on its margin, I distinctly felt a superficial induration of several lines in length, presenting a rather uneven surface. The speculum having been introduced, I found the

mucous membrane of the lower two-fourths of the vagina perfectly healthy, but the superior fourth was red, inflamed, and partly covered with a mucoso-purulent secretion, especially where in contact with the inflamed cervix. The latter was of an uniform red colour. The anterior lip was so much congested and swollen, as to occupy nearly all the concavity of the speculum, and to cover the orifice of the uterine cavity, and the under lip. On its being pushed back so as to expose the latter parts, a circular ulceration, about the size of a shilling, was discovered around the os, but more especially extending on the anterior lip. The pressure of the speculum was found rather painful. A slight oozing of blood took place on the copious mucoso-purulent secretion, which covered the ulcerated surface, being wiped away. When this had been done, the mucus passing from the interior to the cavity of the neck was found quite transparent, a proof that the internal surface of the uterine cavity was not inflamed. The entire surface of the cervix, and upper part of the vagina, was painted over with the solid nitrate of silver, which was passed two or three times over the ulcerated region, and into the cavity of the os

for a couple of lines. The application of the caustic was scarcely attended with any pain. The patient was then told to use cold water vaginal injections several times a day, for two days, and, after that period, injections with the sulphate of zinc. She was also requested to remain quietly at home, on an easy chair, or a sofa, and, as a matter of course, forbidden any communication with her husband.

A couple of days after the cauterization, the pains in the loins and pelvis had much abated, as also the other symptoms above mentioned.

On the eighth day, the cauterization was repeated, the tumefaction of the cervix had much diminished, as also the inflammatory congestion. The ulcerated surface was decidedly smaller. The same local treatment was pursued. On the sixteenth day, nearly all pain in the loins had disappeared ; the cervix uteri was evidently rapidly regaining its natural size, and the ulceration had still further diminished. She was allowed to ride out in a carriage, and even to walk with moderation.

Cauterization with the nitrate of silver was again resorted to on the twenty-first and twenty-fifth

day, but much more slightly, and on the thirty-second she was quite cured. The ulceration had cicatrized, without leaving the slightest induration behind it. The tumefaction of the uterine neck had disappeared, and it had regained its usual coloration and unctuous feel to the touch. I need scarcely say that not a vestige of the symptoms experienced during the preceding months remained. I gave her no medicine internally during the treatment, because she did not require any, and did not even think it necessary to modify her usual diet, which was simple.

The above is a very instructive case, embodying, as it does, most of the symptoms which are observed in this form of inflammation and ulceration of the cervix uteri. When the disease is as severe as in this instance, I think it very probable that, if left to itself for years, as is no doubt often the case in England, general induration and hypertrophy of the cervix may take place even in women who have never borne children.

The cause of inflammation and ulceration of the cervix in women who have not borne children

being local, if that cause be subtracted, and proper measures taken to subdue the inflammation, the cure in most instances takes place rapidly. That this disease is worthy of more attention than it meets with, is certain, not only because it is a source of misery in married life, but because it is, no doubt, often a cause of sterility. That such is the case will be readily understood when we consider that the congestion of the uterine neck, and the copious purulent secretion, which clogs up the uterine orifice, must frequently obliterate the latter. Young females seldom become pregnant whilst suffering from this affection. Messrs. Gendrin, Emery, and Jobert, whose experience of uterine affections in private life is very great, have repeatedly told me that they have known many young married women, their patients, who had remained sterile whilst labouring under this form of uterine disease, and had become pregnant, as soon as cured.

The case which I have just related is an example of ulceration in a rather severe form. The one which I now intend to give is equally interesting, as illustrating the incipient stage of the malady, and also as proving that it is not necessary for intercourse to be carried to excess to give rise to inflam-

mation of the cervix. This is a point which is not without some importance, as, if we admit, which I believe we ought to do, that the cervix in some is so sensitive that very slight irritation is sufficient to inflame it, we shall be induced to look upon our patients in a different point of view to that which would otherwise obtain.

CASE II.

Disease very slight.—Cause, the same as in the previous case.—Cure perfect.

In Paris, as all who are acquainted with Parisian matters well know, the police is very severe, and exercises great scrutiny and control over all persons who are not regularly domiciliated householders. In pursuance of this line of conduct, domiciliary visits are made at irregular periods, in the middle of the night, in the lower order of hotels or lodging-houses, and also in those inhabited by students. This is a precaution rendered absolutely necessary by the irregularity of the lives of some of them, and by the circumstance of their congregating, to the number of fifty, a hundred, or more, in the favourite hotels of the "Pays Latin." When these "*descentes*," as they are called,

take place, every room is visited, and all persons whose passports are not found in order, as also all females, are forwarded to the Prefecture de Police. The following morning, the latter are generally sent to St. Lazare, (the hospital and penitentiary for unfortunates,) unless claimed by two respectable householders. These severe means are adopted, partly with a view to the discovery and arrest of suspicious characters, and partly as a moral check. On one of these "descentes," a young person, named Jourg, eighteen years of age, was taken, and, not having any friends, was detained by the police. In the course of a few days she was examined by the police medical authorities, — a precaution usually adopted in these cases, previous to being discharged,—and was found by them to be labouring under slight ulceration of the os uteri.

It was thought that the affection might be syphilitic; and as she was not an enrolled woman of the town, she was sent to a general hospital, (L'Ourcine,) and not to the infirmary of St. Lazare. The hospital physician kept her a few days, and then, not considering her affection sufficiently severe to require further treatment, sent her back to the police. Here she was again examined by the police physician, who, finding that the ulceration

had not been cured, sent her into M. Emery's wards at Saint Louis, where she consequently came under my notice.

On examination by the toucher, 4th July, 1843, the cervix uteri appeared small and soft, and there was a scarcely perceptible, very superficial, and very circumscribed induration ; no pain on pressure. The speculum showed the vagina to be narrow, and of the natural hue, unto very nearly its superior extremity, where it became rather red and injected. The cervix was small, about the size of the ungueal portion of the medium finger ; it was evidently congested, but soft, offering little or no resistance to pressure. On its anterior aspect there was a small abrasion, about the size of a sixpence, covered with minute red granulations, and a little semi-purulent mucus. There was no other mucoso-purulent discharge in the vicinity. The mucus issuing from the uterine orifice was perfectly transparent ; no pain whatever in the loins, or hypogastric region ; no heat or burning sensations ; no leucorrhœal discharge ; health perfectly good. The patient said, that had she not been told she was ill, she should not have thought that there was anything at all the matter

with her. She stated, that she had been brought up in the country ; that eight months previously she had come to Paris, and had lived since her arrival by working as a sempstress ; that she had made acquaintance with a student, who had persuaded her to accompany him home to his lodgings a few days before she was seized by the police, and that it was the first and only time she had known any one—an assertion which the state of the organs tended to corroborate. She had menstruated for three years, had never experienced any leucorrhœal discharge whatever, and had always been in excellent health. M. Emery, the physician who at first examined her, told me that the lesion, which was very slight indeed, had increased since then ; whilst she was at the Ourcine she had been treated by emollient injections. It was therefore considered that these means were not sufficiently energetic, and the ulcerated surface was cauterized by the acid nitrate of mercury. Emollient injections and general baths were also resorted to.

The tumefaction of the cervix and the ulceration increased under the influence of the first cauterization, (it was evidently rather too ener-

getic,) but decreased under that of the second, third, and fourth, which were performed at intervals of six days.

On the 5th of August the tumefaction and redness of the cervix had disappeared, and the ulceration was all but healed. Astringent injections were then alone used, and on the 15th of August she left, perfectly cured.

In this case, as usual, the cauterizations were scarcely felt by the patient, owing to the natural want of sensibility of the cervix uteri; no lumbar or hypogastric pains or other symptoms developed themselves during the treatment. Had this girl been a young married woman, in the course of a few months she would most likely have been in the same state as my first patient.

Any one who attentively peruses the above description of inflammation and ulceration of the cervix uteri, can scarcely fail to be struck with the great similitude which exists between its symptoms (setting aside the data furnished by the toucher and speculum) and those of the disease described by English writers under the head of

irritable uterus, on which they all lay great stress. I am, indeed, firmly convinced that very many women who are treated for irritable uterus would be found to be labouring under inflammation and ulceration of the cervix uteri, were the speculum used. Irritable uterus, as a distinct disease, exists, no doubt, but must be, I think, a rare affection, as I have seen but very few instances of it among the numerous cases of uterine disease which were under my care in the Paris hospitals.

CHAPTER II.

INFLAMMATION AND ULCERATION OF THE CERVIX UTERI IN WOMEN WHO ARE PREGNANT, OR HAVE BORNE CHILDREN.

*Physiological and Anatomical considerations.—
Causes, symptoms, progress.—Illustrative cases.*

IN the previous chapter I have examined the causes and symptoms of inflammation of the uterine neck in females who have never borne children. I have stated that in them the cervix uteri, as well as the uterus itself, may be considered in a dormant state. We will now proceed to the study of inflammation, ulceration, and induration of the cervix uteri in women who are pregnant, or have borne children, by far the most important part of the task which I have undertaken.

As soon as conception has taken place, a new life, as it were, dawns on the uterus and its ap-

pendages. Instead of remaining in a quiescent condition, merely disturbed at periodical intervals by the menstrual congestion, the uterus assumes a high degree of vitality, becomes the seat of a most active nutrition, and rapidly increases in size. The hard fibro-muscular tissue of which it is formed undergoes, apparently, a complete transformation, and assumes the decided characteristics of muscular structure ; the arteries and veins, previously so small as to be followed with difficulty, are developed to an enormous extent, and the entire organ becomes one of the most instead of one of the least vascular in the human economy. The cervix uteri participates in the change ; it becomes turgid ; it swells, softens, and its entire structure is modified by the exaggerated organic activity which pervades the uterine system. This nutritive activity gradually increases, until at last labour takes place, and the foetus is expelled. The uterus then contracts on itself, and partially regains its former state ; I say, partially, for it is well known that, as long as menstruation persists, the uterus of a woman who has conceived never returns entirely to the size which it presented previous to conception. It is larger, rather more

vascular, and endowed with greater vitality; consequently it is more liable to disease, and especially to inflammation. In confirmation of this fact I may mention a circumstance which I have repeatedly observed—viz., that in metritis unconnected with pregnancy, which is nearly always caused by the sudden suppression of the menstrual flux, the body of the uterus enlarges very much more in women who have borne children than in those who have not. In the latter, also, sudden suppression of menstruation gives rise very frequently to ovaritis instead of metritis, which is very seldom the case with the former—an additional proof of the greater susceptibility to uterine inflammation of women who have borne children.

This remark applies even more to the cervix uteri than to the body of the organ, as the cervix is naturally rather more vascular, possesses a little cellular tissue, which the uterus itself does not, and is covered with a mucous membrane, much thicker and much better organized than the one which lines the uterine cavity. This being the case, it stands to reason that inflammation of the cervix uteri will extend much more frequently throughout its entire substance, and present much

greater gravity, in females in whom the uterus is thus modified, than it does in those in whom the uterus has not undergone any change. In the following remarks I shall endeavour to show that such is really the result produced by the structural modifications which follow conception. I shall begin by examining the causes which give rise to this form of the disease.

CAUSES.—Out of twenty cases of non-venereal inflammation and ulceration of the cervix which we meet with in practice, seventeen may be directly traced to abortion or to labour, two will recognise other causes, and occur in women who have borne children, whilst one only will be found in females who have never conceived. I do not give this statement as the result of statistical researches, but as the impression left on my mind by the examination of a very large number of cases.

When the disease is not the result of abortion or of labour, but occurs in women who have borne children, it may depend on the same causes as in women who have never conceived—causes which we have already enumerated, (sexual irritation,

vaginitis, aphthæ, &c. ;) or it may be the result of the localization, under a chronic form, of general metritis in the central tissues of the neck. When this takes place, the induration and hypertrophy are primary, and the ulceration secondary ; the friction of the indurated cervix against the superior region of the vagina occasioning and keeping up a degree of irritation of the mucous membrane which often terminates in ulceration. This cause of ulceration of the cervix is, I believe, very rare in females who have never conceived, the central tissue of the uterine neck being in them partly protected against inflammation by the peculiar condition of its hard fibro-muscular structure.

When inflammation and ulceration are the result of abortion or labour, they may recognise the same origin—general metritis, occasioned by the abortion or labour, localizing itself, under a chronic form, in the cervix, and giving rise, firstly, to hypertrophy, and subsequently, to ulceration. Indeed, many of the Paris physicians and surgeons appear to think that such is nearly always the case ; that ulceration is, in most instances, the *result*, and not the *cause*, of general induration and hypertrophy of

the cervix. With this opinion I cannot agree. I admit that some ulcerations are generated as above described; but I believe that they are the exceptions, and that, in the great majority of cases, the hypertrophy and general induration (engorgement) are caused and perpetuated by the presence of superficial ulceration. This conviction is founded on my having generally perceived, in recent cases, that the extent and degree of the engorgement coincided with the extent and degree of the ulceration, and on my having been able repeatedly to follow the gradual increase of the inflammatory induration of the cervix coinciding exactly with that of the ulceration. On the other hand, in the cases in which the inflammation and ulceration of the mucous surface have caused the general induration, if the latter persists, it becomes an important cause of disease, continually reproducing the ulceration, unless means be taken to cure it, as well as the ulcerated surface.

Even among those who recognise, like myself, the *ordinary* pre-existence of inflammation and ulceration of the surface of the cervix to general inflammatory induration of its body, erroneous views, I believe, exist. Thus, in a memoir pub-

lished a few years ago in the "Archives," by M. Gosselin, a clever French surgeon, it is stated, without exclusive reference to the sequelæ of labour, that ulcerations of the uterine neck are almost invariably occasioned by internal metritis, or inflammation of the lining membrane of the uterine cavity, and that this form of inflammation nearly always accompanies and keeps up the ulceration. I am quite prepared to acknowledge that internal metritis, especially after labour, is an important cause of inflammation and ulceration of the cervix, as I shall presently explain, but I certainly cannot admit that it is nearly always the sole cause of the lesion, or that it generally coincides with it in its after stages. M. Gosselin founds his opinion principally on the mucoso-purulent character of the discharge issuing from the os uteri, and on the slight hypogastric pains which usually exist in such cases. These data are not, however, in my opinion, sufficient to authorize his views. When ulceration of the cervix exists, its general seat is around the os uteri, and it very often passes more or less into the cavity of the os. Now, when we consider that the cavity of the uterine neck extends some distance before

it reaches that of the body of the uterus, it must be allowed that the presence of a little muco-pus between its lips is not a sufficient proof of an inflammatory secretion taking place in the interior of the uterus. If, however, a wide, thick stream of muco-pus issues deeply from between the lips, it probably originates in the uterine cavity, and the membrane which lines it is most likely inflamed. I have, however, not very often found, in ulceration of the cervix, that this is the case; and when I have, the hypogastric pains have always been much more severe than those which accompany even severe ulceration. I have generally, also, observed, in these latter cases, more or less febrile re-action. I myself believe that we may explain by other considerations the undeniable fact of abortion and labour giving rise to the great majority of the cases of ulceration and general hypertrophy of the cervix which we meet with in practice.

The existence of the uterine mucous membrane is now universally admitted by anatomists, notwithstanding the difficulty of its demonstration—a difficulty which depends, according to M. Jobert, on the absence of a connecting layer of cellular

tissue between it and the subjacent fibro-muscular structure. During pregnancy, the elements of this mucous membrane are gradually dissociated, and disappear, as it were. The apparent disappearance, however, is only temporary, as, after parturition, the elements of which it is formed again aggregate, and it is thus recomposed. This is what occurs in the cavity of the body of the uterus during pregnancy. Let us see what takes place in the cavity of the *neck* of the uterus. Here we have a mucous membrane, the structure of which is, naturally, more perfect than that of the one lining the uterine cavity, and which, instead of being dissociated and apparently destroyed by the gradual enlargement of the uterus, becomes more vascular and perfect as pregnancy advances, and as the general organic vitality of the uterus increases. That such is really the case there can be no doubt, as dilatation of the os uteri only commences in primiparous women towards the end of the sixth month, and even in those who have borne children, not until the end of the fifth. Moreover, the dilatation of the os uteri is very slight, until parturition actually commences, scarcely admitting the end of the index

finger ; and is, most certainly, not calculated to interfere with the integrity of the mucous membrane which lines its cavity. As soon, however, as the pains which precede and accompany the expulsion of the fœtus commence, the dilatation of the os uteri progresses rapidly, and frequently in the course of a few hours it is carried to such an extent as to admit of the passage of the fœtus. Now it appears to me a necessary consequence of this rapid dilatation of a canal lined by a mucous membrane in a state of integrity, that it must inevitably, in many, if not in all cases, be accompanied by erosion, laceration, and contusion of the membrane. In the majority of women, no doubt, these lesions disappear promptly, cicatrization taking place with the greatest ease, under the influence of the retraction of the tissues of the neck, and of the reparative phlegmasia which sets up, after delivery, in the cervix, as well as in the body of the uterus. But if the physiological inflammation of the uterus which follows parturition should prolong its duration, and assume a pathological character ; if remnants of the placenta or of the membranes left in the uterine cavity give rise, by their decomposition, to an

irritating foetid discharge, it is easy to understand that the lesions of the mucous membrane, instead of healing, will almost inevitably become the seat of inflammation and of subsequent ulceration.

When inflammation and ulceration of the cervix uteri recognise this origin, it will generally, but not always, be found, on inquiry, that the last abortion or labour was followed by untoward symptoms of more or less intensity, varying from severe metritis to mere uterine pains, or by a foetid and unpleasant lochial discharge. In such cases, the ulceration will at first exist between the lips of the os uteri or even in its cavity, and if the patient is examined soon enough, it ought to be possible to follow the course of the ulceration as it escapes from the os, and spreads itself on the cervix. This I have been fortunate enough to do on several occasions. In the first case or two in which I thus saw, a few weeks after labour, a small ulceration issuing from the lips of the os uteri, I was struck with the fact, but did not attempt to explain it. But the comparison which I afterwards made between these cases and others in which the lesion of the neck could only be traced to an easy labour, followed, in some in-

stances, by metritis, and in others not, led me to remark the clue which evidently exists between the cause and the effect. The following case will illustrate the way in which this cause of inflammation and ulceration operates.

CASE III.

Disease slight at first; general induration sets in whilst under treatment.—Cure perfect.

On the first of June, 1843, a young woman, named Octavie, aged twenty-two, came under my care, in the wards of M. Emery, at the Hospital Saint Louis. Of a delicate constitution, her health had, nevertheless, been always pretty good. She menstruated at the age of fifteen, and had continued regular until about ten months before, when she became pregnant for the first time. Her pregnancy was unattended with any abnormal feature, and she was delivered in the beginning of May, at the Clinical Hospital, after an easy labour. She did not attempt to suckle her child; and six days after her confinement, finding herself quite well, left the hospital. On returning home, she found full employment at her lodgings, and for the first few days fatigued her-

self considerably. The lochial discharge nearly disappearing, she was seized with rather violent uterine pains, and obliged to take to her bed, and to remain there for the greater part of a week. Finding, when she got up, that the uterine pains, although much less intense, still persisted, and feeling ill, she determined on entering the Hospital Saint Louis, where she arrived not quite a month after her delivery. On examination, she was found to present the following symptoms:—

Tongue loaded; loss of appetite; cephalalgia; muscular weakness; no pain in the lumbar region, but slight pain on pressure in the hypogastric; slight sensation of weight in the pelvis; no lochial discharge. I ascertained, by the toucher, that the uterus was still larger than natural—a fact which her recent confinement sufficiently explained. The cervix was rather voluminous, but presented no local or general induration. With the speculum, I found considerable congestion and redness of the superior portion of the vagina, and especially of the uterine neck. On separating gently the lips of the os uteri, I distinctly saw, on the internal surface of each lip, a small ulceration. The mucus situated between the lips, which I had

previously wiped off, was semi-purulent, and not abundant. The parietes of the vagina were the seat of a slight mucoso-purulent secretion. Under the impression that the ulceration might heal spontaneously, and with the view of observing its progress, the only measures adopted were, emollient vaginal injections, and rest in the horizontal position. The slightly disordered state of the digestive tube, indicated by the other symptoms, was treated by laxatives and diet.

June 10.—All indications of a disordered state of the digestive canal have disappeared, and the general health is very satisfactory, but the uterine symptoms have increased in intensity. The deep-seated hypogastric pain is greater, and she complains of pain in the lumbar region. Around the os uteri, the finger perceives a velvety surface, resting on a slight superficial induration. The density of the entire cervix is increased, as well as its volume. On examining with the speculum, the cervix is found to be evidently more voluminous, and offers greater resistance to pressure. The ulceration has escaped from the os uteri, and extended itself on the cervix, so as to present a surface as large as a sixpence when the lips of the os uteri

are closed. The mucous membrane which covers the cervix is injected; the mucus between the lips scanty, but purulent; a slight purulent secretion in the upper part of the vagina, which is also injected; sensation of increased heat in the same region; no general febrile reaction. Emollient vaginal injections, baths, horizontal position, light diet.

June 16.—The hypogastric and lumbar pains are the same as before. For the last day or two she has experienced, when standing, a sensation of weight and heaviness in the pelvis, similar to what she felt for the first week or two after her confinement. The cervix presents the same velvety sensation, but the superficial induration is nearly lost in general inflammatory induration of the entire substance of the cervix, (engorgement;) the speculum shows that the external ulceration is larger, about the size of a shilling, and more angry-looking than on the last examination. The tissue of the enlarged and engorged cervix resists on pressure. The mucous membrane lining the cervix and superior portion of the vagina is of a vivid red, especially the former, and secretes an abundant mucoso-purulent fluid. For the last few days she has had a leucorrhœal discharge.

The engorgement of the cervix is evidently inflammatory. It is rather painful on pressure, and directed slightly backwards towards the rectum. It was clear that the ulceration was progressing, and becoming more severe, and that the inflammation which accompanied it had extended to the deeper tissue of the cervix, and given rise to inflammatory engorgement of the entire organ. This extension of the disease was no doubt partly to be attributed to the indocility of the patient, whom it was impossible to keep quiet. A more energetic treatment being evidently indicated, the ulcerated surface was cauterized with the acid nitrate of mercury, both within and without the cavity of the cervix. Vaginal injections with the sulphate of alum were prescribed, and the patient was positively ordered to remain in bed.

June 24.—Hypogastric and lumbar pains diminished, as also the sensation of heaviness, and the leucorrhœal discharge. The cervix still voluminous and resistant, but redness less intense. The ulceration has not extended, and the granulations are smaller. Repeat the cauterization; continue the injections and the baths.

July 1.—The hypogastric and lumbar pains, and the sensation of weight, have nearly disappeared;

indeed, they are only perceptible when the patient is standing or walking. The size and consistency of the cervix have much diminished; the ulcerated surface is beginning to cicatrize on its outer margin; the injection of the surface of the cervix and of the superior portion of the vagina has, in a great measure, subsided. Repeat the cauterization; same treatment.

On the 8th, the twenty-fourth day from the first cauterization, the hypogastric and lumbar pains, as also the sensation of weight, were no longer experienced under any circumstances. The cervix had returned nearly to its natural size and colour; the ulcerated surface was, in a great measure, cicatrized, but not entirely. The patient, however, being free from all abnormal sensation, and feeling well in health, refused to stay any longer in the hospital, and left. She promised to return, in order to be examined every week until quite well, but she did not keep her word.

The above case is a very interesting illustration of the probable origin (in my opinion) of the majority of the cases of ulceration and

general induration of the cervix uteri that occur in practice. It is also a very good example of the progress and of the symptoms of this form of the disease, when allowed to take its course unchecked. If we analyze the data which it presents, we shall see how admirably they elucidate the views which I have above explained. A healthy young woman is confined at her full time ; she has an easy labour, not followed by any accident, and is able to leave the hospital in a few days. On her return home, she fatigues herself, and the lochial discharge stops ; she is then seized with symptoms of slight uterine congestion or sub-inflammation, which oblige her to remain in bed for a week. Under the influence of this state of the uterine system, the excoriations or lacerations of the cavity of the uterine neck, originating in labour, do not heal ; inflammatory action sets up in the mucous membrane, and ulceration is established. The symptoms of metritis give way, but there remains a little hypogastric pain, caused, no doubt, by the incipient ulceration. It is doubtful, however, whether she would have applied for relief, so slight were the uterine symptoms, had she not felt poorly, owing to a disordered

state of the digestive functions. She only complained of the general symptoms on her entrance into the hospital, but I fancied there might be something wrong with the uterine cervix on hearing the history of her case, and having been thus induced to examine her, I found that I was correct in my surmise, and was thus able to study the disease at its onset. The subsequent history of the young woman also illustrates very happily the gradual extension of the ulceration, unchecked by the treatment; the superficial induration of the tissue immediately beneath it; and then the extension of the inflammatory induration to the entire structure of the cervix. Had it not been for the saburral affection under which she suffered, we most likely should not have seen her until the disease had reached the condition in which it was on the 16th, and possibly not until much later.

In addition to the causes which I have enumerated, inflammation and ulceration of the cervix nearly inevitably follow tedious and severe abortions and labours, in which the cervix is deeply lacerated and torn—a fact recognised by all who have written on the subject. Inflammation of the

cervix is, indeed, so general after abortions, that it ought always to be kept in mind in the after-treatment of patients in whom it has occurred.

The state of pregnancy itself predisposes to inflammation and ulceration of the cervix uteri. This circumstance, however, is not generally known, even in France, which may be accounted for by the universal disinclination of medical practitioners to examine pregnant women with the speculum. In reality, such an examination is totally devoid of danger, as is proved by the practice of the physicians to the Hospital St. Lazare. All the Parisian women of the town who are found labouring under disease of the uterine organs, (whether venereal or not,) by the physicians to the police on their weekly examination, are sent to this hospital. They are all, as a matter of course, there examined with the speculum, and it is found necessary, with the majority, to continue the weekly use of this means of investigation, until the termination of the treatment. Among the several hundred females who are thus under treatment, there are always a certain number pregnant. These women are examined with the same freedom as the others, and

M. Boys de Loury, the physician, has assured me that he has never been able to trace abortion or any other accident to this practice. He has thus ascertained that ulceration of the cervix is common with pregnant women, and that unless treated and cured, it generally occasions abortion. I have myself seen several of these cases under treatment in his wards, and have had several under my own care. One of my friends and colleagues, M. Costilhes, wrote his thesis on this form of ulceration in 1843. This thesis is the only account of it with which I am acquainted. I may here mention that it is principally to the kindness of M. Boys de Loury, and of M. Costilhes, his house physician, that I am indebted for what I have seen of the practice of the Hospital St. Lazare, in which I never held office, and which is scrupulously closed to the medical public. The pathological field in this establishment is a most splendid one. M. Boys de Loury examines with the speculum, on several days in each week, above forty women at a sitting, from one end of the year to the other.

From the circumstance, which I before mentioned, of females seldom becoming pregnant

nant whilst labouring under ulceration of the cervix, I am inclined to think that in pregnant women the inflammation and ulceration generally commence subsequently to conception, not anteriorly. The changes which occur in the nutrition of the organ must render it then, as I have already explained, much more liable to irritation and inflammation than in the non-pregnant state. These ulcerations present some peculiarities, which I shall allude to more at length in describing the symptoms and progress of the disease.

SYMPTOMS AND PROGRESS.

The *first* symptoms of inflammation and induration of the uterine neck in women who *have* borne children are the same as in those who have not, but in the former they very soon acquire an intensity which they seldom present in the latter. Moreover, in women who have borne children, owing to the greater vitality of the uterine tissue, as I have already explained, the inflammation readily extends to the central structure of the cervix, and gives rise to *inflammatory induration of the entire organ*, which induration is accompanied by a new train of symptoms. Thus it will be seen that the

form of inflammation and ulceration which is observed in women who have never conceived—is, in reality, merely the first stage of the disease, as it is found in females in whom the uterine structure has undergone the change which accompanies and follows impregnation. It would, indeed, be scarcely worth while to establish any distinction between what, in reality, are merely different stages of the same disease, were it not that such a distinction has a decided practical advantage. It impresses forcibly on the memory that, in one class of females, the incipient symptoms of the disease only are to be expected, and thus draws the attention to data which otherwise, in their case, would not, most likely, be deemed sufficiently important to demand investigation. It also enables us to understand at once how it is that in some cases very simple therapeutic means are nearly always successful; whereas in others these same means frequently fail to effect a cure, the disease requiring more energetic treatment.

I need not, therefore, lay much stress on the symptoms which indicate *incipient* inflammation of the uterine neck, in women who have conceived, as I have already described them. They are: slight

lumbar and hypogastric pains, with or without leucorrhœal discharge. On examination by the toucher, heat of the upper part of the vagina, fulness, congestion of the cervix, absence of the unctuous sensation which the healthy cervix presents; when ulceration exists, a soft, velvety surface, resting on a very superficial induration. On examination with the speculum, redness of the cervix, which is more or less tumefied; the redness being uniform, or presenting red papulae, or white pustulae, constituted by mucous glands, hypertrophied, or distended with muco-pus. If ulceration exists, the ulceration is nearly always situated round the os uteri, and may present merely a scarcely perceptible abrasion, or a large ulcerated surface covered with numerous florid granulations: the ulceration is covered with muco-pus, and bleeds very readily.

The induration which accompanies ulceration of the cervix does not, however, long remain confined to the surface in women who have borne children. The inflammation gradually extending to the deeper structures, a great portion, or the whole of the cervix, becomes more or less actively hypertrophied and indurated. That this inflam-

matory induration is only, in the great majority of cases, the result of the extension of the ulcerative inflammation, is, in my opinion, an undeniable fact. I have repeatedly been able to follow instances—such as that of Octavie, (case 3)—in which a slight ulceration was at first the only lesion, and in which the general induration subsequently made its appearance, gradually becoming more and more marked as the ulceration increased in extent. I have also repeatedly seen an ulceration confined to one lip, accompanied by engorgement of that lip only. Indeed, there is generally, in recent cases, a very evident conformity between the degree of the general induration and the extent and virulence of the ulceration. We must also take into consideration another very important circumstance—viz., the time that has occurred since the last abortion or labour. The nearer a female is to the epoch at which she was last delivered or miscarried, when attacked with inflammation and ulceration of the cervix, the greater will be the central engorgement produced by the ulceration. This hypertrophy and induration is generally confined to the cervix, but sometimes it passes on to the body of the uterus, then, obviously, like-

wise the seat of inflammation. At first, the central induration is evidently of an active inflammatory nature, as indicated by the increased heat of the organ, the vivid redness, and slight pain on pressure. If, however, it is not subdued in the course of time, these symptoms of inflammatory engorgement partially subside, and the organ becomes the seat of mere chronic hypertrophy, the inflammatory character of which is scarcely recognisable. The size of the engorged cervix varies from that of a walnut to that of an egg.

The uterus is so slightly poised or suspended in the cavity of the pelvis, that the slightest modification in its volume gives rise to a change in its position. The inflammatory hypertrophy of the cervix increasing considerably the specific gravity of the inferior portion of the uterus, the entire organ descends, prolapses. The cervix is thus brought much nearer to the vulva; at the same time it frequently falls backwards, and presses on the posterior parietes of the vagina, whilst the body of the uterus is carried more or less forward. This latter change of position, which constitutes anteversion of the uterus, or retroversion of the neck, is not, however, so common as partial prolapsus. Whenever there is much engorgement

of the cervix there is always more or less prolapsus if the patient is standing; the degree to which it is carried depending on the extent of the hypertrophy and on the state of the vagina. If the vagina has retained its tone and its contractility, it will support the uterus; but if, on the contrary, it is lax, and offers no support to the engorged cervix, as is sometimes the case in women who have had many children, the latter may fall as far as the orifice of the vulva. This abnormal laxity of the vagina may be occasioned by the disease itself; the distention of the superior portion of the vagina by the hypertrophied cervix diminishing its tonicity. The engorged cervix then falls, as it were, into a non-contractile pouch.

The direction of the healthy cervix varies considerably, even in females who have never suffered from uterine disease. In most it is directed to the vulva, whereas in others it is turned backwards, and points to the anus. This latter direction of the cervix is stated, by M. Lisfranc, to be one of the results of marriage. It is easy to understand, that in females with whom the cervix is naturally long, marriage should produce this effect. Whether the backward direction of the cer-

vix be natural or acquired, it is certain that it constitutes a predisposition to anteversion of the uterus or retroversion of the cervix, should the latter subsequently become the seat of general induration.

The condition of the patient is considerably modified by engorgement of the cervix, and the gravity of the disease much increased. The sensation of weight and heaviness in the hypogastric region, scarcely perceptible as long as the cervix is merely congested, becomes very marked and distressing, especially in walking and standing. Indeed, if the inflammatory hypertrophy is considerable, the patients not unfrequently complain that whenever they are on their legs they feel as if the womb were on the point of falling out of the pelvis. The deep-seated hypogastric pain is increased, and sometimes pressure above the pubes is slightly painful. The pain in the loins and in the lumbar region is generally continued, and most distressing. Severe pains are also often experienced in the thighs, along the course of the sciatic, obturator, and crural nerves. These pains are no doubt, in a great measure, to be attributed to pressure, and to the traction exercised by the engorged and prolapsed cervix on the nerves

supplied to the uterus by the lumbo-sacral plexus. They are much more severe when the cervix is ulcerated and engorged, than when it is merely ulcerated. When there is retroversion of the neck, the hypertrophied cervix pressing on the rectum renders evacuation of the faeces difficult and painful. The body of the organ being also thrown forward, may irritate the bladder, and occasion frequent desire to urinate. The presence of the ulcerated and indurated cervix in the cavity of the vagina secreting an abundant muco-purulent fluid, which partly stagnates in that organ, is inevitably followed by the inflammation of its mucous membrane, and by general vaginitis, which increases the amount of the leucorrhæal discharge.

When a patient is in this state, often long before, the general health begins to fail. Racked with pain, suffering from an abundant leucorrhæal discharge, it is impossible that the economy should not suffer. In nearly all cases, the appetite flags, the tongue becomes loaded, the bowels irregular, and in the more severe ones, the patient loses flesh and strength, suffers from continued headach, from want of sleep, and becomes dyspeptic, hysterical, hypochondriacal. As

the disease gains ground, when proper measures are not adopted to arrest its progress, all these symptoms increase in intensity; the patient is nearly unable to leave her bed, and the skin assumes the yellow cadaverous hue, which is occasionally seen in severe chronic inflammatory disease of the uterine organs, and which may be mistaken, and no doubt occasionally is, for a symptom of cancerous cachexia. In these severe cases, the inflammation and induration are seldom, if ever, confined to the cervix uteri. They extend more or less to the body of the uterus, giving rise to a sub-acute form of metritis, indicated by the increased size of the organ, and by the increased severity of the uterine pains. There is also, generally speaking, more or less febrile reaction, especially in the latter part of the day.

Whenever there is even superficial inflammation of the cervix uteri, menstruation is modified by its existence. Indeed, in slight cases, the modification may often materially assist the diagnosis. The monthly congestion of the uterus generally appears to exacerbate the local inflammation, which, on its side, renders the due performance of the menstrual excretion difficult,

probably by abnormally increasing the uterine congestion; thence intense uterine pains, increased pain in the loins, and not unfrequently hysterical symptoms. This exacerbation often begins two or three days before the appearance of the *menstrua*, and lasts for one, two, or more days afterwards. Generally speaking, the ordinary duration of the menstruation is curtailed, and the amount of the excretion diminished; but it is not always so, for sometimes, more especially in severe cases, flooding will occur at each menstrual epoch, lasting many days. There is but little doubt that the monthly congestion, instead of favouring the resolution of uterine inflammation, as some authors have pretended, is one of the chief causes of its being difficult to overcome.

Toucher.—In this form of inflammation and ulceration of the uterine neck, the toucher is a much more valuable means of diagnosis than in the former, or, at least, gives much more certain data. The finger very soon reaches the prolapsed cervix, which is only one, two, or three inches from the vulva, especially if the woman is standing, instead of four or five, as is naturally the case.

The vagina is moistened by an abundant leucorrhœal secretion, and is often hotter than usual. The increased size of the cervix is at once recognised, as also its resistance to pressure and great density. The os uteri is nearly always more or less open, so as to admit a small portion of the extremity of the finger, and the soft velvety sensation of the ulcerated surface is occasionally very evident, when the granulations are luxuriant or fungous.

Sometimes, if the disease is the result of difficult or instrumental labour, or of a miscarriage, the cervix is found deeply fissured, so as to present several lobes or lobules. When this occurs, even a practitioner who has had great experience in uterine disease, may be led to conclude that the affection is of a cancerous nature, unless he analyze very minutely the history and symptoms of the case; the more so, as it is in such instances that the general symptoms are the most alarming. I have met with several cases of this kind, in which so many of the symptoms of ulcerated uterine cancer were present, (cachectic cancerous tinge of the skin, extreme emaciation, abundant leucorrhœal discharge, often tinged with

blood, occasional flooding, indurated, lobulated, and ulcerated cervix,) that it was with difficulty I could form a correct diagnosis. This may be done, however, if we attend to the history of the patient, and examine minutely the local state of the uterine organs. The origin of the disease may be always traced to difficult parturition. The fissures divide the cervix into lobules, but each lobule is itself smooth and round, however indurated it may be. These fissures radiate from the os. The vagina is perfectly free, at its union with the cervix, which is seldom the case in advanced ulcerated cancer. Moreover, in these extreme cases, the inflammation always extends deeply into the tissue of the uterus, the volume of which is increased. By pushing back the posterior or anterior cul de sac of the vagina with the pulp of the index finger, it is not difficult to ascertain whether or not the induration of the cervix extends to the posterior or anterior plane of the uterus. In order to ascertain whether the volume of the uterus itself is increased, one or two fingers of the right hand must be introduced into the vagina, the pulp of the fingers directed towards the pubis of the patient. The fingers

being then placed underneath the cervix, and the posterior vaginal cul de sac pushed back, it is very possible to fix or to raise the uterus by them. If the left hand is placed at the same time on the hypogastric region immediately above the pubis, and the patient is told to relax the abdominal parietes, the abdomen may be depressed over the uterus, so as for the latter organ to be distinctly felt between the finger or fingers in the vagina, and the hand over the pubis. Its volume may thus be very accurately appreciated. The ovaries, lateral ligaments, indeed, the entire pelvic cavity, may be explored in this way with the greatest ease. It is, however, absolutely necessary, to accomplish this exploration satisfactorily, that the examination should be made whilst the patient is lying on her back. The two hands could not be used freely if the patient were placed on her side, as is usually the case in this country.

Speculum.—The speculum reveals still more plainly the state of things. When the cervix has become the seat of inflammatory induration, whether caused or not by the ulceration, the existence of the induration tends to keep up the ulceration, and will invariably reproduce it if the latter be

cured whilst it is suffered to remain. As I have stated, the extent and degree of intensity of the ulceration generally coincide with those of the engorgement. The ulceration itself is susceptible of presenting all the modifications which suppurating surfaces are capable of offering under different circumstances in other parts of the body, from the minute granulations of a slight abrasion, to the livid fungous vegetations of an unhealthy sore. The distinction into erptic, scorbutic, serofulous, cancerous ulcerations, &c., which some authors (M. Duparcque and others) have proposed, has no practical utility whatever, and need scarcely arrest our attention for a moment. I shall therefore merely mention that tubercular ulceration is the ulceration which follows the softening and rupture of tubercles situated in the uterine cervix. The softening of the tubercle occasions a little inflammation around it in the tissue of the neck. For some time after it has emptied itself, the orifice of the tubercular cavity remains the seat of a circumscribed ulceration, and the cavity itself constitutes a little abscess, which, as is usually the case with a scrofulous abscess, is rather tardy in filling up. Tubercles are very rarely met with

in this situation. M. Lisfranc has only seen four or five instances during the entire course of his immense practice. The diagnosis is founded on the presence of tubercles in other parts of the economy, and in the existence of the small circumscribed abscess of the cervix, containing caseous tubercular matter, which may be pressed out with the edge of the speculum.

In women who are pregnant, inflammation and ulceration of the cervix gives rise to the same symptoms as in those who are not. The existence of the disease is, however, seldom suspected; the leucorrhœal discharge, the lumbar and hypogastric pains, and other abnormal sensations, being nearly always attributed to the pregnancy. On examination with the speculum, the ulcerated surface is generally found to be covered with large, livid, fungous granulations, which bleed with the greatest ease. The portion of the cervix that is not ulcerated also presents a livid hue, which, it must be recollectcd, is natural to pregnant women. The engorgement is always considerable, its degree, however, depending, says M. Costilhes, *on the more or less advanced stage of the pregnancy*, an opinion which coincides entirely

with the results furnished by my own experience. The engorgement is sometimes so great, and the ulcerated surface is covered with such unhealthy-looking granulations and vegetations, that M. Boys de Loury has repeatedly seen the disease mistaken for cancer. In one instance, quoted by M. Costilhes, several practitioners, in a consultation, had proposed and decided on amputating the uterine neck, as affected with cancerous ulceration. The woman entered St. Lazare to undergo the operation, but M. Boys de Loury, convinced that she was merely labouring under a severe form of the inflammatory ulceration of the cervix of pregnant women, refused to operate. Six months later, she was delivered at St. Lazare, and the alarming symptoms of the disease, which it had been previously found impossible to entirely subdue, speedily disappeared.

Before I pass on to syphilitic and cancerous ulceration, I shall lay before my readers a few cases which will exemplify the most interesting features of the disease which I am describing. As, with the exception of one or two which I shall borrow from my former colleague, M. Costilhes, they all occurred under my own care, in the wards

of M. Emery, the talented physician of Saint Louis, whilst I was his house physician, and were taken down by myself, I can answer for their accuracy. I shall begin by giving a few illustrations of the milder forms of the disease, and conclude with some more severe cases. They will also be useful to illustrate what I shall have to say respecting the treatment of the disease.

CASES ILLUSTRATIVE OF THE MILD FORM OF
ULCERATION AND INDURATION OF THE UTERINE
NECK IN WOMEN WHO HAVE BORNE CHILDREN.

CASE IV.

Disease not severe. Ulceration, with slight general induration, following metritis, the result of abortion. Cure perfect.

On the 10th of July, 1843, a young woman, named Stevaux, aged twenty-one, sempstress, presented herself among the out-patients at St. Louis. Robust, and tolerably healthy in appearance, she had always enjoyed good health. At nineteen she was delivered of a full-grown child, and soon recovered. Three months and a half

ago she miscarried at seven months, at the "Clinique." The miscarriage was followed by metritis, which necessitated the application of leeches to the abdomen. She remained three weeks in the hospital. On leaving, she felt well, but severe lumbar and hypogastric pains came on as soon as she began to walk, and she was obliged to re-enter the Hôtel Dieu, where she remained in bed several days, taking baths and using emollient injections. Finding herself quite well, she again left. The pains, however, soon returning with increased intensity, accompanied by leucorrhœal discharge and cardialgia, she was induced to apply for advice at St. Louis. Suspecting a lesion of the cervix, I at once admitted her.

On examination, I found that the menstrua had not appeared since the abortion; there was pain in the loins and hypogastrium; sensation of weight in pelvis, but only when standing or walking; slight leucorrhœal discharge; cardialgia, but appetite good; complexion natural. By the toucher I ascertained that the os uteri was rather open, and presented a velvety sensation; cervix rather engorged in its entire extent, but more especially near the lips of the os; not very volu-

minous, being easily received into the extremity of the speculum. Around the os uteri there was an ulceration as large as a sixpence, presenting small healthy granulations. The remainder of the cervix was deeply injected, as also the superior part of the vagina; mucoso-purulent secretion on the inflamed surfaces; mucus issuing from the uterus perfectly transparent; uterus natural size. Treatment: baths; rest in horizontal position; astringent vaginal injections; cauterization with the acid nitrate of mercury.

On the 20th, the lumbar and hypogastric pains had diminished, as also the local inflammatory symptoms, and the cauterization was repeated.

On the 22nd, she complained of severe uterine pain. The uterus was rather sensible on pressure through the parietes of the abdomen, and there was slight febrile action. Fearing an attack of metritis, forty leeches were applied to the hypogastrium and to the groins. The leeches bled profusely, and on the following day the menstrua made their appearance; the uterine pains at once abated; they were evidently merely the result of severe uterine congestion, the forerunner of menstruation. The loss of blood which followed the

application of the leeches, by relieving this congestion allowed the menstrual excretion to take place. The menstrual flux lasted four days, but was not very abundant.

On the 28th, the lumbar and hypogastric pains were no longer felt. The cervix had diminished in size, and presented less resistance; the ulceration was beginning to heal on its circumference. The cauterization was repeated, and the same treatment pursued.

The ulceration was again cauterized on the 8th of August, and on the 20th she left, quite cured.

In this young woman, the ulceration most likely began in the cavity of the os uteri subsequently to the metritis, and was the cause of the induration of the cervix and of all the other symptoms.

CASE V.

Disease not severe. Ulceration and general induration of the cervix. Proximate cause: disturbed menstruation a few months after delivery; cure imperfect.

Bonvalet, aged twenty-four, staymaker, entered the hospital the 3rd of June, 1843. Lymphatico-sanguinous temperament; robust constitution;

has never had any serious illness. Menstruated at seventeen ; menstrua generally last eight days. Married a few months after menstruation. Has had three full-grown children and two abortions ; labours always easy ; was delivered the January previous of a full-grown child, which she did not nurse. The menstrua returned five weeks after her confinement, and she felt quite well. A few months ago, one of her children fell ill, and died, after six weeks' illness ; she was much excited and fatigued. The menstrua appeared at the usual period, but were very abundant, lasted seventeen days, and were accompanied by great lumbar and hypogastric pain. The pains continued, although less intense, after their cessation, and a leucorrhœal discharge set in, accompanied by cardialgia. Finding these symptoms gradually increasing, she applied for admission.

She was then found to present the following symptoms : countenance pale ; appetite not very good ; slight cephalalgia ; leucorrhœal discharge ; hypogastric and lumbar pains ; slight sensation of weight in pelvis ; no vesical irritation or pain in evacuating faeces. Toucher :—Cervix not very voluminous ; hard and indurated in its entire

extent; the induration, however, is greater around the os uteri; it does not extend to the uterus; lips of os open; velvety sensation. Speculum:—Mucous membrane of superior portion of vagina injected, also that of cervix, which enters into the extremity of a middle-sized speculum. The anterior lip constitutes two-thirds of its volume; ulcerated surface as large as half-a-crown, covered with florid granulations; margin well defined; abundant mucoso-purulent secretion. Treatment:—Cauterization with the acid nitrate of mercury; baths; emollient and astringent injections; horizontal position; light diet.

A manifest improvement occurred in the course of a few days. She was cauterized every week, and the same treatment was pursued until the 29th. The ulceration had then nearly healed, and the engorgement had in a great measure disappeared, as also the pains and leucorrhœal discharge; general health much better; appetite good. Being tired of the absence from her family, she insisted on leaving the hospital, promising to return once a week to be examined. This she did on the 11th of July. She stated that she had walked a good deal after leaving the hospital, and

had seen her husband, when she suffered considerably. The lumbar pains and sensation of pelvic heaviness had returned; the ulceration and remaining engorgement had rather increased than diminished. The ulcerated surface was slightly touched with the nitrate of silver; and rest of the organ, baths, aluminous injections, and the horizontal position, enjoined. She did not return for advice.

CASE VI.

Disease not very severe.—Ulceration and general induration of the cervix.—The result of repeated abortions and labour.—Cure not quite perfect.

E. Bertrand, aged twenty-six, waistcoat maker, entered the hospital on the 15th of April, 1843. At the age of twenty she miscarried at seven months, and from that epoch she experienced lumbar pains and leucorrhœal discharge. Eighteen months afterwards she consulted M. Emery, who, on examination, found that she was labouring under ulceration of the cervix, for which she was under treatment three months. Fifteen months ago she miscarried at three months, and three months ago she was delivered of a full-

grown child. She has never been free from lumbar pains and uneasy sensations since her first miscarriage, six years ago. These feelings persisted during her last pregnancy, and became still more marked afterwards. Finding this to be the case, she applied for advice, about two months after delivery, when I found her to present the following symptoms:—

Severe lumbar and hypogastric pains; marked sensation of weight and bearing down; rather copious leucorrhœal discharge; cardialgia; anorexia. Toucher: cervix rather voluminous and indurated; surface velvety; orifice of os uteri open; increased heat. Speculum: injection of entire vagina, especially of superior portion and of cervix; an ulceration rather larger than a shilling on both lips, covered with florid, vascular granulations; abundant mucoso-purulent secretion. Treatment: cauterization with the acid nitrate of mercury; aluminous injections; baths; rest in horizontal position; light diet. Within a week, as usual, under the influence of this treatment, the intensity of the above symptoms had much subsided. The cauterization was repeated every week, and the same treatment pursued until the 1st of July.

The ulceration was then entirely cured, but there was still a little general induration of the cervix. All pains and uneasy sensations had disappeared, as also the leucorrhœal discharge, and the general health was much improved. She was accordingly dismissed.

The cure in this case can scarcely be considered perfect, as the cervix remained slightly indurated, a state which, if the induration did not subside, would constitute a predisposition to the return of inflammation and ulceration. This was probably also the case when she was treated a few years previously ; and, as we have seen, the disease returned.

CASE VII.

Disease rather more severe.—Induration extending to the uterus posteriorly ; retroversion of the cervix ; the result of labour.—Cure perfect.

Heloise Nuble, aged twenty-four, entered the hospital on the 24th of May, 1843. Has always enjoyed good health, was menstruated at fifteen ; menstrua usually last three days ; has had three full-grown children, and one miscarriage ; has always had very slight leucorrhœa since the age

of sixteen. Her last labour took place at the Clinique, in October, 1842; it was perfectly easy and natural; she did not nurse her child. She left the hospital on the seventh day, and began to work immediately. The lochia lasted five weeks, and two months after her delivery the menstrua returned. The first return of the menstrua was normal, but the second, which took place about four months ago, three months after her confinement, was attended with great uterine pain; the excretion was very abundant, and lasted eight days. Since that date, she has experienced severe lumbar and hypogastric pains, heaviness, and abundant leucorrhœal discharge. Each menstruation has been stormy, more abundant than usual, and has lasted more than eight days. Finding that she had become too ill to attend to her avocations, she determined on entering the hospital. On examination I found that she presented the following symptoms:—

Complexion natural; appearance, that of a person in tolerable health; nevertheless, complains of anorexia, cardialgia, muscular weakness, cephalalgia; the tongue is loaded; severe lumbar and hypogastric pain; pelvic heaviness, slight

dysuria, difficulty and uterine pain in evacuating fæces ; abundant leucorrhœal discharge.—

Toucher: cervix voluminous, prolapsed, and turned backwards so as to rest on the posterior parietes of vagina ; indurated, resisting pressure, induration passing on to posterior surface of uterus ; lips open, velvety sensation, increased heat.—

Speculum: vivid injection of vagina and cervix ; abundant mucoso-purulent secretion ; uterine mucus transparent ; ulceration around os uteri, as large as half-a-crown, covered with soft vascular, rather fungous, bleeding granulations. — *Treatment*: cauterization with the nitrate of mercury ; the brush was brought several times over the ulcerated surface ; slightly astringent injections, baths, rest in bed, very light diet.

The leucorrhœal discharge was streaked with blood for a day or two after the cauterization. The latter was repeated every week, and the same treatment, with slight modifications, pursued until she was discharged on the 15th of July. The intensity of the inflammatory symptoms soon subsided ; she was only confined to her bed for fifteen days, and then allowed to sit up in a

recumbent posture. As soon as the ulceration began to cicatrize, the induration diminished, leaving firstly the posterior plane of the uterus, and the pains and heaviness disappeared, except when walking. As the engorgement diminished, the cervix ascended, ceasing to press on the vagina. On the 15th of July, the ulceration was quite cicatrized; the cervix had recovered its normal size and colour, the general health was good, and all uneasy sensations had disappeared.

In this instance it is quite evident to me that the origin of the disease may be traced to the last labour; although it was only when it had progressed sufficiently to interfere with menstruation that it attracted the attention of the patient. The slight pains and uneasiness which she no doubt, had previously experienced, were not perceived, as was the case with Octavie, (Case 3.) A woman who has just gone through all the uneasy sensations of pregnancy and parturition, may well not remark the slight incipient symptoms of ulceration commencing in the cavity of the os uteri. The cases which I next intend to give will be illustrative of still more severe forms of the disease.

CASES ILLUSTRATIVE OF THE MORE SEVERE FORMS
OF INFLAMMATORY ULCERATION AND INDURA-
TION OF THE CERVIX, IN WOMEN WHO HAVE
BORNE CHILDREN.

CASE VIII.

*Disease severe, the result of abortion.—
Cure incomplete.*

Fanny Mercier, aged twenty-seven, applied for advice at the Hospital St. Louis, the 1st of June, 1843, and was admitted. Of robust constitution, her health had always been good, and she had menstruated regularly from the age of fifteen. She had a full-grown child at four and twenty, and recovered easily from the labour. About ten months ago she miscarried at three months. The abortion was caused by a journey, and was followed by flooding, which lasted six weeks. A month after the cessation of the flooding, the menstrua returned, but were attended by great pain. She had experienced great hypogastric and lumbar pains from the time of the miscarriage, and these sensations gradually increased, each menstrual period becoming more and more painful.

Her general health completely failing, she determined to enter the hospital. On admission, she was found to present the following symptoms:—

Considerable emaciation; great general debility; abundant leucorrhœa; great pain in the lumbar and hypogastric regions; sensation of pelvic weight and bearing down; pain in making water; also slight uterine pain on evacuation of fæces; cardialgia.—*Toucher*: cervix low down, near the vulva, turned rather backwards, very voluminous, hard, insensible to pressure;—the general induction of the cervix does not sensibly extend to the uterus; lips open, hard, but presenting a velvety sensation; increased heat.—*Speculum*: mucous membrane of vagina injected, especially in the superior region; cervix very large, can scarcely be admitted into the largest-sized speculum; of a livid red colour, and presenting an ulceration larger than half-a-crown. This ulceration is covered with fungous bleeding granulations. The mucus between the lips of the os uteri is purulent, but it evidently does not come from the uterine cavity.—*Treatment*: at first emollient, and then astringent, injections; general baths;

cauterization once a week with the acid nitrate of mercury; rest, in a horizontal position; very light diet.

Under the influence of this treatment, the inflammatory symptoms gradually diminished, the ulceration began to cicatrize, and the general health rapidly improved.

On the 28th, the ulceration was nearly healed. The hypertrophy of the cervix had diminished by half; the leucorrhœal discharge had nearly ceased; and the pains in the loins and hypogastric region were scarcely felt; the cervix had nearly regained its normal position in the pelvis. Same treatment.

On the 1st of July, she was made to work, for one day, by the sister of charity of the ward, and the bearing down and lumbar pains returned. Labour of any kind was forbidden.

On the 15th of July, the ulceration was quite healed, and the mucous membrane of the cervix had nearly regained its natural colour; the cervix itself, however, was still rather voluminous and indurated, and when she walked she felt heaviness and slight lumbar pain. The leucorrhœa had quite disappeared, and the general health was

tolerably good. She wished to leave, and was allowed to do so.

In this case, we see the disease beginning with the abortion, and its symptoms gradually increasing for ten months, until the health failed. The inflammatory hypertrophy of the cervix had then become chronic, confirmed, and we consequently find that the treatment which cured the ulceration was only partially successful in reducing the general induration of that organ. It persisted, indeed, to a certain extent, when she left the hospital, and was destined, in all probability, to bring back the ulceration, to occasion prolapsus, retroversion of the neck,—in a word, to perpetuate uterine disease until more effectually cured.

CASE IX.

Disease severe.—Cause, abortion; general health much impaired.—Cure imperfect.

Rosalie Allar, aged thirty-two, applied for advice at the Hospital St. Louis, on the 27th of May, 1843, and was admitted. Of rather weak constitution, she has nevertheless always enjoyed good health until within the last year. Was men-

struated at thirteen, and has always been so regularly, unless pregnant. Has had three full-grown children; labours easy. Within the last year has had two abortions, one at four months, the other at five. In each instance the miscarriage was occasioned by a fall, which was followed by flooding for a month or six weeks previous to abortion. The last took place in January. She was afterwards obliged to remain in her room during two months, owing to excessive weakness; she suffered much, at the same time, from pains in the loins and hypogastrium. The menstrua did not return until three months after, were accompanied by very severe uterine pain, and did not last more than a few hours. They again appeared, but in the same manner, at the beginning of the present month, (May.) On admission, she presented the following symptoms:—

Complexion rather pale and sallow; considerable emaciation; extreme debility; continued cephalalgia and vertigo; palpitations; cardialgia; tongue loaded; appetite bad; bowels constipated; great pain in hypogastrium and loins; sensation of pelvic heaviness and bearing down; great leucorrhœal discharge. Has been very low, irritable,

and nervous ; has fainted repeatedly of late, under the influence of slight mental impression.—*Toucher*: cervix low down, turned towards the rectum, voluminous, indurated in its entire extent ; the induration passes on slightly to the body of the uterus ; the surface of the cervix around the os feels fungous.—*Speculum* : mucous membrane of the lower part of vagina natural ; of upper portion and of cervix, vividly injected ; ulceration as large as a half-crown around the os, covered with fungous granulations, which bleed freely even without being touched ; abundant mucoso-purulent secretion tinged with blood.—*Treatment* : astringent injections ; baths ; cauterization once a week ; rest in the horizontal position ; light diet.

For the first ten days but little relief was experienced, all the symptoms, local and general, then began rapidly to diminish in intensity, and the health to improve. She was seized, at different periods, with slight hysterical symptoms and diarrhoea, which, however, soon gave way under the influence of appropriate remedies.

On the 27th of July, the ulceration was almost entirely healed, and the mucous membrane covering the cervix, as also that of the vagina, had nearly

recovered its natural colour; but the general induration of the cervix, although the organ was much reduced in size, still persisted. It was hard, resistant, more voluminous than natural, and retroverted. There was scarcely any mucosopurulent secretion, and scarcely any pain in the lumbar or hypogastric regions. The general health was satisfactory, but not quite restored. She left the hospital in this state by her own wish.

The origin of the disease from abortion was here very evident. As in the previous case, we see the chronic induration of the neck resisting the means adopted to cure the ulceration, (owing, possibly, to these means not being sufficiently energetic,) and remaining to perpetuate the disease at a future period. Although the disease was of less duration than in Mercier, it had made more impression on the general health, on account of the weak nervous constitution of the patient. The cure was still more incomplete than with the former patient. In all probability a few months of social life would bring her again nearly into the same state as when she entered St. Louis.

CASE X.

Disease very severe.—Cause, abortion ; cervix deeply fissured ; general health very much impaired.—Cure perfect.

Elizabeth Droot, aged thirty-five, entered the Hospital St. Louis on the 1st of June, 1843. Of a naturally robust constitution, she had never had any important illness, except the present. Married at seventeen; she had since had eleven children without a miscarriage. Her labours were always easy, and she soon recovered. Last November her husband died; she was then in the seventh month of her twelfth pregnancy. The following month she had a dispute with her husband's relations, and was beaten until she lost consciousness. Abundant flooding followed, and lasted five days, when she was forcibly delivered, with the forceps, of a dead child. She was obliged to remain in bed for a month, and was even then, for many weeks, scarcely able to sit up, and has remained very ill ever since. In April, the menstrua returned, but with flooding, which lasted twenty-two days. On admission, she presented the following symptoms :—

Extreme emaciation ; features drawn and sal-

low; the coloration of the skin is universally of a yellow, cancerous hue; cephalalgia; does not sleep; tongue loaded; no appetite; cardialgia; diarrhoea; has generally fever in the latter part of the day; abundant leucorrhœal discharge; often sanguinolent; severe pains in hypogastrium, increased by pressure, also in lumbar region, and along the thighs; sensation of pelvic weight and falling down; pain in making water, none in defecation.—*Toucher*: cervix within an inch or two of the vulva, the large and small labia of which are lax, red, and congested; the vagina is also lax, the finger penetrating into it as into a non-contractile pouch. It contains a large quantity of muco-pus. The cervix is voluminous, and thrown back on the rectum; it is unequal in its surface, being divided into three lobules, by two deep fissures. These fissures, however, radiate from the centre, and the lobules themselves are smooth and regular in their irregularity. The entire cervix is extremely indurated; the induration passes on to the posterior and anterior surface of the uterus; the latter organ is considerably increased in size, and is sensible on pressure; the surface of the cervix presents a velvety sensation;

the finger with which the toucher is performed is tinged with blood, and has an offensive odour, but not that penetrating nauseating smell which is found in ulcerated cancer.—*Speculum*: the cervix is too large to be received in the largest speculum; the anterior lip alone fills it; an ulceration, covered with large bleeding granulations, is perceived on the cervix, which it partly covers; considerable pain, caused by the examination; lips open; muco-pus issuing from the os.—*Treatment*: cauterization of the ulcerated surface with the acid nitrate of mercury every week; emollient injections four or five times a day; poultices to the abdomen; absolute rest in bed; general baths at the bed-side; emollient enemata, with a few drops of laudanum; beef-tea only at first, and afterwards very light diet.

Under the influence of these measures the diarrhoea soon stopped, and in the course of about ten days, improvement began to manifest itself, both in the local symptoms and in the general health. This improvement became rapidly more decided; the lumbar and hypogastric pains diminished, as also the mucoso-purulent discharge; the uterus diminished in size, and the

inflammatory induration was soon confined to the cervix. This latter then began to decrease; the ulceration, formerly stationary, cicatrizing; the leucorrhœal discharge diminished, and the vagina gradually regained its tone; the tongue became clean, appetite and sleep returned, and the skin gradually lost its yellow hue. This patient was very docile; she remained a month in bed, and when she was allowed to rise, refrained, as requested, from walking.

On the 20th of July the ulceration was quite healed, and the mucous membrane had regained its natural colour. The induration of the cervix had all but entirely disappeared, and the organ itself had nearly recovered its natural size and position. The discharge had quite ceased; she experienced no pelvic heaviness and no pain, and the general health was becoming tolerable. She was, however, still very pale and weak. She had menstruated twice during her residence in the hospital, about a fortnight after her admission, and a few days before she left. The first time she suffered a great deal, and lost a large quantity of blood, much less, however, than previously. The second time the menstrua appeared nearly

as usual, with the exception of slight colics. Wishing to rejoin her children, she entreated to be allowed to leave, and was therefore dismissed.

This is one of the most interesting cases that I have, as yet, met with. The cancerous hue of the skin, the extreme emaciation, the flooding, and sanguinolent discharge; the irregular, indurated, lobulated, and ulcerated cervix, would all have induced one who was not well acquainted with uterine disease to consider that he had to do with a case of ulcerated cancer. Indeed, I am fully convinced that many of the instances of cured cancer narrated in modern works were no other than cases of this kind. By attending, however, to the history of the disease, and by a careful analysis of the symptoms, a correct diagnosis became possible. It is worthy of remark, that a simple antiphlogistic treatment, coupled with cauterization, in this instance, in less than two months cured the ulceration, and entirely resolved the induration of the uterus and cervix. The reason, no doubt, was, that this induration being of an acutely inflammatory nature, was more amenable to antiphlogistic remedies. In the first array of symptoms, we find there was no

pain in defecation, although the cervix was so voluminous and retroverted. This is to be accounted for by the diarrhoea.

CASES OF ULCERATION DURING PREGNANCY.

CASE XI.

Rather severe case, from the Thesis of M. Costilhes.

Clara B——, aged twenty-one, entered St. Lazare the 2nd Sept., 1842, being in the fourth month of her first pregnancy. She has never had any syphilitic disease.—*Toucher*: neck voluminous, indurated, ulcerated, and sanguinolent; she has pain habitually in the hypogastrium.—*Speculum*: on the engorged cervix an ulceration the size of half-a-crown, of a fungous, vegetating nature, and violet coloured; abundant leucorrhœa.—*Treatment*: injections with decoction of walnut-leaves; cauterization twice a week with the nitrate of mercury; baths.—This treatment was continued until the 6th of March, without any perceptible improvement; she was then cauterized twice a week with Vienna paste solidified, (caustic potass and carbonate of lime,) and injections of acetate

of alum, three times a day, were substituted for those first used. The ulceration began to give way under this treatment, and was nearly well, when, on the 1st of May, she was taken in labour, and delivered of a full-grown child. The labour was tedious, but unaccompanied by any unusual occurrence. The ulceration reappeared after delivery, but gave way to emollient and then astringent injections, and she left, cured, on the 6th of July.

CASE XII.

Severe ulceration of the cervix in a woman two months pregnant; cured by cauterization with potassa fusa.

Louise Lejeune, aged twenty-nine, two months pregnant, entered St. Lazare on the 28th of February, 1843. She was delivered of a full-grown child a year previous, and miscarried five months ago, at two months and a half, without any assignable cause. On the cervix an ulceration, covered with fungous, vegetating granulations, three quarters of an inch in diameter; considerable inflammatory induration and hyper-

trophy of the uterine neck, which is of a violet hue. Constant pain in the hypogastrium. Abundant mucoso-purulent discharge.

On the 1st of March the ulcerated surface was cauterized with the solidified potassa fusa. The cauterization was afterwards repeated once every week. A ball of lint, spread over with mercurial ointment, was daily applied to the ulceration ; and vaginal injections of a decoction of walnut leaves were used three times a day.

On the 27th of March, the granulations had lost their fungous character, and the deep violet hue which they at first presented, was less marked.

On the 1st of April, the nitrate of silver was substituted to the potassa fusa, the treatment being otherwise the same ; and on the 15th of May she left, cured. The cervix was still red where the ulceration had existed. All pain had disappeared.

CHAPTER III.

SYPHILITICAL ULCERATIONS OF THE CERVIX UTERI.

BUT little has been written respecting syphilitical ulceration of the cervix uteri, and that little is of a very contradictory nature; some writers thinking syphilitical ulcerations common, whereas others assert that they are extremely rare. When, however, we recollect that, even in Paris, the speculum has only been brought into use, as a means of diagnosis, within the last ten or fifteen years; and when we also bear in mind the great difficulty of determining precisely, in many cases, what is and what is not a syphilitical sore, this discrepancy will not be a cause of surprise.

By most writers on uterine disease, syphilitical ulcerations of the cervix are not even alluded to,

a great omission. Thus, in Lisfranc's lectures on diseases of the uterus, edited by Dr. Pauley, not a word is said on the subject; neither are they mentioned in Dr. Ashwell's late treatise on the diseases peculiar to women. M. Duparcque considers these ulcerations to be rare, but evidently confounds them with other diseases, (corroding ulcers, &c.,) under the title of chancrous ulcers, so as to render it difficult to understand what are his real views on the subject.

On the other hand, M. Gibert, the learned physician of St. Louis, in a pamphlet on uterine disease, published in 1837, states, that out of five hundred women whom he had examined with the speculum at the venereal hospital of Lourcine, one hundred and forty presented *granular* ulcerations, the greater part of which he considered syphilitical. None of these ulcerations, however, offered the physical characters of a real chancre. I have myself seen numerous ulcerations of the cervix uteri, under similar circumstances, but they did not present the appearance of true chancres. I was, consequently, surprised to read, a short time since, in Dr. Balbirnie's treatise on the "Organic Diseases of the Womb," that, "during

a twelvemonth he had seen *many* beautiful examples of real Hunterian chancre existing on the os tincæ, at the Hôpital des Veneriens, in the service of M. Ricord." I was the more surprised to meet with this statement, as M. Ricord has repeatedly told me that he also has very rarely met with the Hunterian chancre on the cervix uteri. I have lately ascertained, also, from Mr. Acton, the author of a very able work on venereal disease, who was several years M. Ricord's pupil and friend, that my recollections of that renowned practitioner's opinion and practice are perfectly correct, and that uterine chancres are scarcely ever met with in his ward or practice. Dr. Balbirnie must, indeed, have totally misinterpreted the pathological meaning of the cases which he saw.

On the other hand, all the treatises on syphilis with which I am acquainted are nearly or quite barren on the subject of syphilitical ulceration on the cervix uteri. The question, indeed, may be considered as yet an open one, and can only be fully cleared up by extended and persevering researches on a large scale. In giving the result of my own experience, I shall avail myself of that of others, and shall endeavour to present a faithful

picture of the present state of science, with reference to syphilitic ulcerations of this region, so that future labourers in the field may know to what points to turn their attention.

The first step to be taken in the study of syphilitic ulcerations of the cervix uteri is their separation into two classes; the first comprising the true classical, Hunterian chancre, the primitive venereal ulceration; and the second including ulcerations which do not present the characters of the true chancre, but appearing under doubtful circumstances, are believed to be venereal by some writers.

REAL CHANCRÉS OF THE CERVIX.

There can be no doubt that the real Hunterian chancre is very rarely met with on the cervix uteri. I have myself only seen two instances of it during my lengthened connexion with the Paris hospitals. The late M. Cullerier, who was many years physician to the Paris Venereal Hospital, and habitually used the speculum, only met with three cases during his entire career. M. Gibert, who was several years physician to the Lourcine, (a female venereal hospital,) when he

wrote the pamphlet already alluded to, had only seen three instances of true chancre. At the Hospital St. Lazare, where many hundred cases of syphilis, in all its forms, are annually treated, only a *very* small number of real chancres are met with in the course of each year. M. Duparcque admits their extreme rarity; and although he has long enjoyed a very extensive practice in the treatment of uterine disease, he is obliged to borrow from other authors the two or three cases which he gives in his work to illustrate syphilitic chancrous ulceration. The experience of M. Emery, of St. Louis, who is physician to the "Dispensaire,"* and intrusted with the weekly visitation of the females who are there examined, furnishes the same result. The extreme rarity of *primary chancres*, with their usual physical characters, on

* Some of my readers may not be aware that all "unfortunates" in Paris are registered in the police book and examined weekly by medical gentlemen appointed for that purpose. The locality where this examination takes place is called the Dispensaire. Those who are found diseased are sent to St. Lazare, a kind of female hospital prison. Formerly the examination was merely external, but now the speculum is invariably used. This system has much contributed to diminish the frequency of venereal disease in Paris.

the cervix uteri must therefore, I think, be admitted as a fact.

The question, however, at once presents itself: whether the apparent rarity of primary chancre is to be attributed to the syphilitic virus being seldom deposited on the organ, or to the chancrous ulceration, when it does occur, soon losing its characteristic appearance, and assuming the aspect of an ordinary ulceration. M. Gibert seems to adopt the latter opinion, and says that a chancre probably passes into "granular erosion," — which he thinks venereal, — when its duration is prolonged. I am myself disinclined to accept this interpretation. I do not see why a specific chancrous ulceration should lose its characters any sooner on the cervix uteri than on the other mucous surfaces lining the cavities of the body. A syphilitic ulceration retains its peculiarities in the mouth, in the fauces, and on the parietes of the vagina, and I see no rational reason why, when left alone, it should rapidly lose its characteristic appearance on the cervix uteri; so rapidly, indeed, as to render it difficult to meet with a chancre on that organ, however great the opportunities afforded for

the investigation of syphilitic disease. I think, indeed, that it is much more probable that primary infection seldom takes place on the cervix, the virus of a sore being brushed off before the cervix is reached, and being thus deposited, in the immense majority of cases, on the mucous surfaces covering the external and inferior regions of the female sexual organs. This view is corroborated also by the rarity of chancres in the superior part of the vagina, which must proceed from the same cause. Their frequency, indeed, decreases as we recede from the vulva, their ordinary seat. If the views which I now advocate are correct, if a real chancre situated on the cervix retains its peculiar appearance, in the same way as when situated in other regions, we must then admit that the very great majority of the ulcerations that are so frequently found on the cervix of females labouring under the various forms of syphilis, are not primary syphilitic ulcerations modified by time, but either secondary syphilitic or non-syphilitic ulcerations.

The researches of M. Ricord with reference to inoculation of the secretion from ulceration of the cervix, the only researches with which I am well

acquainted, corroborate the above views. In his treatise on inoculation, he merely gives one instance of chancre of the cervix. (See Case 13.) The pus from this chancre was inoculated on the thigh, and gave rise to the characteristic ulceration. On the other hand, inoculation was unsuccessful in four cases in which ulceration of the cervix accompanied blennorrhagia. In two of these cases the ulceration was the ordinary bleeding granular ulceration; in one, the ulcerated surface was covered with a white pseudo-membranous film, which only disappeared with the eschar of the cauterization. In the last there were chancres on the vulva, and the ulceration of the cervix was absolutely like a chancre. The inoculation was only performed a week after the ulcerated surface had been cauterized; at that time the eschar had fallen, and the ulceration was rosy, and covered with healthy granulations. Was this a chancre, or not? I am unable to say, but am inclined to think, with M. Ricord, that it was not. The patient had been labouring under severe blennorrhagia for many months.

When a chancre really does exist, it presents the usual characters. The ulceration is deeply

excavated, and its surface is covered by a yellow or greyish film ; the edges are elevated, irregular, and indurated. This chancre is no doubt generally accompanied, except at the onset, by slight partial induration of the cervix, the extent of the induration depending on the uterus having, or not having, undergone the changes which follow conception ; and in the former case on the length of time that has elapsed since the last labour or abortion. The size of the chancre or chancres, for there may be several, varies. Those which I have seen were small, one was not as large as a fourpenny piece, the other was still smaller. M. Duparcque mentions a case in which the chancre was much larger than in either of my patients. If the chancre is allowed to remain untreated, it may heal spontaneously, or it may, according to M. Duparcque, assume a chronic form, and remain unchanged for months. When this occurs, the state of sub-inflammation of the cervix, which the chancre keeps up, is followed by general induration of that organ. This induration may be carried to such an extent as to give rise to stony hardness of the cervix, so as to simulate ulcerated scirrhus. (See Case 14.)

The presence of a well-formed chancre might, possibly, be appreciated by the toucher. The excavation, with its indurated margin, would lead, at all events, to the conclusion that an ulceration existed, the nature of which the speculum would partly reveal. The local and general symptoms produced by a chancre in the first period of its formation are very obscure. Indeed, they may, at first, be said scarcely to exist; they are then, at the most, confined to very slight hypogastric pain, and to a scarcely perceptible mucoso-purulent secretion. Should, however, the chancre increase in size, and give rise to irritation, inflammation, and induration of the cervix, then all the symptoms which we have already enumerated as the result of these lesions manifest themselves—viz., severe hypogastric and lumbar pains, sensation of weight and bearing down in the pelvis, leucorrhœa, &c. The following cases will illustrate these varieties of chancre of the cervix.

CASES ILLUSTRATIVE OF REAL CHANCRE
OF THE CERVIX UTERI.

CASE XIII.

Blennorrhagia. A chancre appears at the os uteri a fortnight after the commencement of treatment.—Cure.

A. M—, housekeeper, aged thirty, entered the Hospital St. Louis, the 1st of May, 1843. Of robust constitution, she habitually enjoys good health, and is menstruated regularly. Some few years ago, she bore a full-grown child; she has not presented since then any uterine symptom, nor suffered from leucorrhœa. For the last two years she has lived with an elderly person, with whom she has kept up intercourse. A few weeks before her admission, she communicated to this person a chancre, which was followed by a bubo. She confesses having exposed herself to suspicious communication. She was carefully examined in town with the speculum, but no trace of a chancre was found. The entire surface of the vagina, I was told, was then the seat of an abundant mucoso-puriform discharge, but there was no other lesion; the cervix and os uteri were perfectly healthy.

After her admission, I examined, very carefully, the external and internal genital organs, the case, as presented to my notice, bearing directly on the identity of blennorrhagia and syphilis, and tending to prove that blennorrhagia is susceptible of communicating chancre. I did not, however, find the slightest erosion of any portion of the mucous surface. The cervix was perfectly natural and healthy, not even congested, merely presenting a slight redness of its mucous membrane, in common with that of the vagina. Between the lips of the os uteri there was a stream of opaque muco-pus apparently issuing from the cavity of the uterus. The uterus was slightly sensible on pressure, and rather more voluminous than in the natural state, but as she had menstruated only two days previously, I did not attach much importance to these symptoms. On opening the lips of the os uteri as much as possible with the speculum, and wiping away the muco-pus, I saw no appreciable lesion.

Founding my opinion on the data furnished by the above examination, I concluded that the disease was merely blennorrhagia, occupying the entire vagina, and extending into the uterine

cavity. The patient was therefore treated accordingly, (cubebæ, balsam copaibæ, emollient injections, general baths, and light diet.) The inflammatory symptoms and the discharge diminished rapidly.

In the ten days which followed, she was twice examined with the speculum, for I was most anxious thoroughly to investigate the case, and each time the cervix presented the same appearance; merely the redness gradually diminished, as likewise that of the vagina: the increased sensibility and the congestion of the uterus had entirely disappeared.

On the 16th of May, I again applied the speculum, and saw distinctly a small ulceration issuing from the cavity of the os uteri, and turning over on to the anterior lip. The ulceration presented a greyish surface, and an irregular indurated margin; it was deemed to be a true chancre by M. Emery as well as by myself, and many other persons who saw it. Under this impression, it was cauterized with the acid nitrate of mercury, and the patient was submitted to a mercurial treatment—viz., bichloride of mercury, one-seventh of a grain, and sarsaparilla.

In spite of these measures, the ulceration extended itself over a surface as large as a four-penny piece. It lost, however, its characteristic appearance after the second cauterization. The increase of the ulceration was attended with gradual induration of the anterior lip of the cervix, which became as large as a small walnut. The cauterization was repeated every week. After the third, the ulceration began to diminish in size, but it was not cicatrized until the end of July. The flow of muco-pus from between the lips of the os ceased a short time after the escape of the chancre from the cavity of the os. The blennorrhagia disappeared during the course of the treatment. The administration of mercury was continued during a month, without producing salivation. No other syphilitical symptoms manifested themselves. The patient left cured on the 1st of August. There was still a little engorgement of the anterior lip of the cervix.

In this woman it is more than probable that the chancre remained concealed within the cavity of the os uteri during several weeks, a very singular and important feature in the case. Had

I not persisted, week after week, in examining her with the speculum during the treatment of the blenorrhagia, although there was no manifest necessity for such an examination, the chancre would never have been discovered, and the case would have been considered as an unimpeachable proof that blennorrhagia in one person can produce chancres in another. Had also the uterine chancre healed spontaneously, and secondary symptoms supervened at a later period, they, likewise, would have been attributed to the blennorrhagia. One carefully observed and well-authenticated instance, such as the above, goes a great way to annihilate the value of the exceptionable cases by which some authors endeavour to establish the identity between syphilis and blennorrhagia.

In the above female the muco-pus issuing from the cavity of the os uteri was most likely the product of the concealed chancre. It is very probable that there was no internal metritis present, although the symptoms which usually indicate its existence were observed. It will be remarked that the characteristic appearance of the chancre ceased to be observed on the falling of the second eschar produced by the cauterization.

CASE XIV.

Chancre of the cervix; inoculation; blennorrhagia.—

Cure. (Abridged from M. Ricord, on Inoculation, page 212.)

Catherine H—— entered the hospital April 4th, 1834. Had contracted several chancres seven months previously; had followed no treatment. She presented, on her admission, a chancre on the left outer lip, and another on the corresponding nymphæ. On examination with the speculum, there were found a puriform vaginal secretion, and an excavated greyish ulceration on the anterior lip of the cervix, with irregular, elevated margin; opalin uterine catarrh. Until the 10th, emollient injections only were resorted to, the chancre being dressed with opiated cerat.

On the 18th, the acute period of the disease had disappeared; the discharge was white and less abundant; the ulceration of the cervix had not changed its aspect; pus was taken from its surface and inoculated on the right thigh; pus was also taken from the peri-uterine cul-de-sac, and inoculated on the left thigh. The uterine ulcerations were then cauterized with the nitrate of silver.

On the 19th the inoculated points were red and elevated.

On the 20th the vesicles were quite formed on both thighs. On the 22nd they were full of pus; and on the 1st of May well-characterized chancres existed on both thighs. These chancres were then cauterized, and dressed with calomel and opium ointment. The chancre of the nymphæ had disappeared under the influence of cauterization; that of the outer lip was cicatrizing, as also the chancre of the cervix, which had been repeatedly cauterized.—Injections and plugging of the vagina with lint steeped in a lotion containing acetate of lead.

On the 20th the original chancres were cicatrized, but their bases were indurated. The blennorrhagia had disappeared. Pills of protiodide of mercury and sudorific syrup (a preparation containing mercury) were given, in order to attack the indurations.

On the 30th the inoculated chancres were also healed, and the induration had nearly disappeared.

On the 7th of June, cure perfect.

CASE XV.

*Chronic chancre ; extreme induration of the cervix.—
Cure by mercury.*

This case occurred to M. Cullerier, and is quoted by M. Lagneau and M. Duparoque. It is said to be the only one that Cullerier ever met with in private practice.—Madame —— had lived several years with a gentleman, whose bad health was occasioned by frequent returns of an old venereal disease. From the commencement of her cohabitation with this person, she experienced, in the neck of the uterus, a degree of sensibility which was not usual to her, but did not attribute it to the real cause. This sensibility gradually increased, until it became acute lancinating pain, accompanied by a sanious, abundant discharge. After three years' suffering, she consulted Cullerier, who recognised a considerable scirrhous (?) engorgement of the cervix, which was also the seat of several ulcers with hard indurated margins. It was from these ulcers that came the sanious discharge above mentioned. Being convinced that the disease was venereal, Cullerier treated it with a preparation of mercury,

(the bichloride.) In two months the ulcerations were cicatrized, the cervix had returned to its normal size, and all the symptoms under which she laboured had disappeared.

This case illustrates the extreme (stony) induration of the cervix, which sometimes follows chronic ulceration of that organ, whether the ulceration be syphilitic or not. The term schirrhous, used by Cullerier, is evidently synonymous of hard, and does not convey the meaning of cancer. The ulceration was certainly syphilitic, but it is impossible to say whether it was a primary sore or not. From the imperfect description given of it, it appears to resemble more those deep, sanious, chancrous-looking sores which are found on the falling of pustular syphilides, than the primary chancre.

I shall now examine the *non-chancrous-looking* ulcerations of the cervix, which so frequently complicate blennorrhagia and the various secondary forms of syphilis, and endeavour to ascertain what is their real nature.

THE NON-CHANCROUS-LOOKING ULCERATIONS,
WHICH COMPLICATE THE VARIOUS FORMS OF
SYPHILIS.

As I have already attempted to prove, both by my own experience and that of other competent judges, the real classical, inoculatable, Hunterian chancre, is *very* seldom met with on the cervix ; and the facts which I have brought forward to establish this proposition are, I think, so peremptory, that we may consider this point as definitively settled.

Ulcerations, however, *not* presenting the above-mentioned characters, are exceedingly common with females labouring either under blennorrhagic discharges, or under primary, secondary, or tertiary syphilis ; much more so, indeed, than could possibly be supposed by practitioners who do not habitually use the speculum, however accustomed to the treatment of syphilitic diseases.

The frequency of ulceration of the cervix uteri in women suffering under acute or chronic blennorrhagia, has been pointed out for some years by the Paris surgeons, but I am not aware that its great frequency as a concomitant of secondary syphilitic symptoms has been insisted upon.

In the spring and summer of 1843, whilst in

charge, at St. Louis, of a female skin-ward of seventy-five beds, in which there were always a great number of syphilitic skin affections, I carefully examined with the speculum all who were so affected, in order to ascertain what was the state of the internal genital organs. I was led to adopt this course by finding, *on inquiry*, that several of these patients, who presented no syphilitic disease of the external genital organs, except trifling leucorrhœa, were labouring under the symptoms which I have enumerated as indicating slight inflammation and ulceration of the cervix uteri. On examining these latter patients, I found the cervix ulcerated and slightly indurated, and it then occurred to me that the others might be similarly affected, although they had not directed my attention to any symptoms of uterine disease. To my great surprise, I found that three out of four—perhaps more—also presented ulcerations of the cervix. Most of these patients were young women who had either never borne children, or had been confined several years previously, and were under treatment for syphilitic psoriasis, lichen, rupia, &c. When questioned narrowly, they *all* admitted that they experienced slight hypogastric pain;

that congress had been rather painful for some time; some, that they had likewise a slight leucorrhœal discharge. They had not, however, paid any attention to these symptoms.

I may here remark, that it is not surprising that women should scarcely attend to uterine symptoms when very slight. Nearly all females who live in towns present a slight vaginal secretion, the quantity and nature of which is modified according to their general state of health, and a hundred other circumstances. This *slight* secretion—which is generally of a mucous, and not of a purulent character—constitutes the non-morbid leucorrhœa of towns. It is not in itself a disease, nor, in many instances, the symptom of disease, and seldom increases to any great extent, unless vaginitis sets in; in that case, as I have stated, the cervix, generally, soon participates in the inflammation, and ulcerates. A slight change, therefore, in the consistency, colour, or abundance of this secretion, is scarcely calculated to attract the notice of the female in whom it occurs. On the other hand, there are few women with whom the periodical congestion of menstruation does not occasion more or less uterine pain, and many may be said to suffer, more or less,

during the entire duration of the catamenial flux, as well as for a day or two before and after.

Being thus accustomed, whilst in health, to the existence of uterine pain, its presence, when the symptom of disease, does not at first cause that alarm which it otherwise would. Thence it is, no doubt, that even in hospital practice in France, cases of inflammation and ulceration of the cervix seldom come under the hands of those physicians and surgeons who are acquainted with the disease until the induration which follows brings in its train a series of symptoms of a much more serious character than those which existed in the onset of the disease. Thence it is, in a word, that *incipient* inflammatory disease of the cervix uteri is, generally speaking, only to be found, *if sought for* by the practitioner.

But, to return to the subject before us: What was the nature of these ulcerations? Were they syphilitical, modified chancres, or secondary ulcerations, or were they merely inflammatory sores? In their appearance, I myself could discover little or no difference from the ulcerations observed on non-syphilitical patients, and was therefore inclined to deny their general syphilitical nature. Some were large, some small; some had a well-

defined margin, others not; some were covered with large unhealthy granulations, others with small, florid, healthy granulations; whilst some, again, presented a kind of pseudo-membranous film. On referring to M. Gibert's treatise, I found that his experience at the Lourcine Venereal Hospital coincided with what I saw with reference to the frequency of ulceration of the cervix in persons labouring under syphilis. He did not appear, however, from his statistics, to have met with it as often as I had—a fact which may, however, be explained. The Lourcine is the hospital to which females labouring under syphilis, who apply to the central board for admission, are drafted;* and the slightest suspicion of a woman labouring under blennorrhagia or syphilis is

* The Paris hospitals are all under one common jurisdiction. Every day a board of surgeons, and another of physicians, sit in a central situation, to admit patients into the different hospitals. The director or governor (a non-medical resident functionary) of each hospital is bound to send every morning, before ten o'clock, to this central board, (bureau central,) a list of the vacant male and female beds. The patients applying for admittance, if found, on a superficial examination, to present any symptoms of disease, are at once sent to the different hospitals until all the beds are filled, that hospital being selected which is the best suited for the disease, or which is the nearest to their home. There are nearly always more beds than applicants. Should this, however, not be the case, for some days together, as occurs

sufficient to ensure her being sent to it, in preference to any other. The consequence is, that women are often admitted who are not labouring under blennorrhagia or syphilis, but under some other diseases of the genital organs. Yet they are all examined with the speculum.

Out of the five hundred patients examined indiscriminately by M. Gibert, the details of whose cases he took down, one hundred and forty-four presented ulceration of the cervix, (*erosion granulée.*) Of the latter, fifteen offered no other morbid symptom; eighteen also presented chancres; twenty-four, condylomata, or mucous tubercles; eleven, buboes; ten, consecutive

in times of epidemic disease, supplementary beds are at once set up in the various hospitals, to meet the emergency. This truly Samaritan system of relieving the sick poor, deserves to be better known and appreciated in this country than it is at present. In Paris there is no difficulty whatever placed in the way of the admission of the poor into the hospitals. In addition to the "bureau central," every morning a physician and surgeon likewise admit applicants at each hospital, and the "interne" on guard, during the absence of the physicians or surgeons, has also power to admit whomsoever he may think proper, day or night. No questions are asked as to means, &c., the very fact of a person applying for admission into a hospital being considered a sufficient guarantee of his or her poverty. The Paris hospitals are therefore the ordinary asylum of the poor, when sick. Indeed, one third of the population of that city die under their roof.

ulcerations of the amygdalæ, mouth, or pharynx ; ten, rhagades ; six, vegetations ; eleven, syphilitides ; and eight, blennorrhagia. In some cases there was no appreciable leucorrhœa ; in the majority of the remainder, but little. When describing these "granular erosions," (page 13,) M. Gibert says : that "this ulceration, always " rather superficial, generally has a rounded " form, and is more or less plainly limited ; it " occupies sometimes the superior lips, some- " times the inferior, and sometimes the two, " and sometimes it even appears to penetrate " into the cavity of the cervix uteri ; its sur- " face is red and granular, and contrasts notably " with the smooth and polished surface of the " normal neck ; and it bleeds easily. Gene- " rally speaking, a veil of viscous semi-trans- " parent mucus, which flows from the orifice o " the neck of the uterus, covers the granular " erosion."

Founding his opinion on the above description, M. Gibert endeavours to establish this form of ulceration as a distinct species of syphilitical ulceration, which he appears to think succeeds in many instances to chancres. In this view of the lesion, as I have already said, I cannot

agree with M. Gibert, however much I respect his talents and great medical knowledge. I do not, I must confess, see in his description of the "granular erosion" the elements of a distinct species of ulceration. The characters which he gives to it are the characters which I have all along met with in merely inflammatory ulcerations. The circular form of the ulceration, on which he subsequently lays great stress, is the form which I have hitherto seen all kinds of ulceration of the cervix assume, in forty-nine cases out of fifty. Sometimes an ulceration may be irregular, serpiginous; indeed, some practitioners have (very unnecessarily, I think) admitted a serpiginous variety; but this is the exception, not the rule. As to the "granular" appearance of the ulceration, *all* ulcerated surfaces are covered with granulations of some kind or other, and I never could understand why the term "granular" should be applied to any kind of ulceration as a distinctive name. *All ulcerations being granular*, the addition is altogether unnecessary, and, indeed, implies nothing. For the above reasons, although I accept M. Gibert's experience as substantiating the extreme frequency of ulceration

of the cervix in persons labouring under syphilis, primary or secondary, I do not accept his views with regard to the syphilitic nature of these ulcerations.

The experiments which M. Ricord has performed, with reference to the inoculation of syphilis, have thrown very great light on this question, as on every other connected with the pathology of syphilis. M. Ricord, as I stated above, has repeatedly inoculated the pus from these ulcerations,—that is, from ulcerations of the cervix, not offering the physical characters of true chancre, but existing in women who labour under some of the various forms of syphilis—without giving rise to the formation of chancres.

I have also learnt, from Mr. Acton, that he repeated M. Ricord's experiments, some years ago, in Paris, along with M. Vidal de Cassis, then surgeon to the Lourcine, with a like result. Inoculation with the pus from the non-chancrous-looking ulcerations of the cervix in syphilitic patients never gave rise to chancres.

I must add, as an element in the diagnosis, that these ulcerations generally gave way easily

to the usual treatment—viz., slight cauterization, injections, &c. It is scarcely necessary to say, however, that in those instances, few in number, in which considerable induration of the cervix exists, it is as troublesome as usual. In all the cases which have come under my notice, the venereal symptoms were treated at the same time as the uterine.

From the facts which I have brought forward, and the considerations into which I have entered, I think I am warranted in concluding that the non-chancrous-looking ulcerations observed on syphilitic patients are not primary syphilitic sores, or modified chancres, in the immense majority of cases; I do not say in all, because it is generally admitted that real primary sores do not always assume the appearance of the classical chancre.

Admitting that these ulcerations are not primary syphilitic sores, is it equally true that they are merely inflammatory? may they not be secondary? That some *may* be so I think is probable, but I do not believe it probable that more than a very small number can possibly have such an origin. On the one hand, affections of the mucous membranes are not so very common, (as secondary

symptoms of syphilis,) and on the other, a secondary ulceration of a mucous surface presents peculiar characters, which are not those usually observed. I have, however, seen ulcerations of the cervix, in syphilitic patients, present the grey pseudo-membranous covering which is seen in secondary ulceration of mucous membrane, and am quite willing to admit that they may really have been instances of this form of disease.

If the ulcerations which we are examining are not syphilitic, what is their nature? To this question I answer, that they are nearly all, in my opinion, inflammatory. In vaginitis, be it simple or virulent, as I have already explained, the inflammation generally soon extends to the cervix, where, owing to the great vitality of the organ, to the number of its mucous follicles, and to its exposed situation, the inflammation easily passes on to ulceration.

The prevalence of ulceration in women labouring under the various forms of syphilis without vaginitis is certainly singular; but I am inclined to attribute it, in a great measure, to the abandoned life which they nearly all lead, or have led.

I shall conclude this account of syphilitical ulceration by the following propositions :—

First.—The real classical chancre, presenting its ordinary physical characters, is *excessively* rare on the cervix uteri.

Secondly.—Ulcerations presenting the characters of the inflammatory ulceration are, on the contrary, excessively common on patients labouring under blennorrhagia, or primary, secondary, and tertiary syphilis.

Thirdly.—Some few of these ulcerations may be primary or secondary, but the very great majority are merely inflammatory.

CHAPTER IV.

CANCEROUS ULCERATION OF THE UTERINE NECK.

THAT the various forms of cancer are not of an inflammatory nature, or the immediate result of inflammation, is now universally admitted. Indeed, nothing but the determination of Broussais and his followers to bend facts, however inflexible, to preconceived theoretical notions, can explain their classification of malignant formations among inflammatory diseases.

Thanks to the researches of modern pathologists, and especially to the results recently furnished by microscopical inquiry, we have become tolerably well acquainted with the anatomical characters and structure of cancer, but we are as much as ever in the dark with respect to its cause, and to its

intimate or primitive nature ; we have learnt, it is true, that the development of cancerous tissues proceeds precisely on the same principles as that of normal embryonic tissues, by the successive generation of cells, but we are still totally unacquainted with the nature of the general change which precedes the formation and development in the economy of these abnormal cells.

Cancer not being an inflammatory disease, its history, when located in the cervix uteri, does not form a necessary part of the subject which I am treating. Moreover, it has been so ably handled by several recent writers, among whom I may mention Dr. Lever and Dr. Ashwell, that a lengthened history of it would be uncalled for. In order, however, to complete the picture which I have drawn of inflammatory ulcerations, it will be absolutely necessary for me to enter into some few details respecting this fearful malady.

When cancer attacks the uterus, it nearly always commences in the neck of the organ, a circumstance which, although it is not an inflammatory affection, may be partly explained by the frequency of inflammatory disease in that region. On making inquiries respecting the previous

health of patients affected with uterine cancer, I have repeatedly learnt that they had long suffered from "engorgement" of the uterus. Inflammatory ulceration and induration of the cervix is not, however, the real and unique cause of the development of cancer in these cases. For the latter to manifest itself, for the hypertrophied cervix to degenerate, the unknown general change which, in common with most modern pathologists, I believe to precede the formation of cancerous tissue, must have taken place in the economy. The entire system having fallen a prey to the cancerous cachexia, the first generation of the morbid tissue takes place, as a matter of course, in the diseased organ, the cervix. Thus it is, that when the cachexia exists, a blow on the breast will often determine the localization of the anatomical element of cancer in that organ.

The frequency of inflammatory affections of the cervix uteri at once explains, on this principle, its being so much more commonly the seat of cancer, the mammae perhaps excepted, than any other organ in the body. The cancerous cachexia supervening, if the uterine neck is

either acutely or chronically inflamed, it will most likely be the first organ in which the disease will localize itself; if, on the other hand, no general cachexia supervenes, the inflammation, ulceration, and induration of the cervix may exist, and often do exist, for many years, without any degeneration taking place.

Malignant or cancerous disease may present itself under various forms in the neck of the uterus, as in other parts of the body. These forms are, the corroding ulcer, the cauliflower excretion, and scirrhus, encephaloid, and colloid cancer. I do not include in this enumeration melanosis, because it is not, properly speaking, a malignant affection.

The corroding ulcer is a rare disease. It is a malignant form of ulceration, commencing on the cervix, or in the cavity of the cervix, which gradually extends itself in surface and in depth, without there being any abnormal deposit or formation. It may be considered identical with the cancerous ulceration of the skin, described by old surgical writers under the name of "noli me tangere," (a very different disease to lupus, by the by.) Corroding ulcer of the cervix uteri is not difficult to recognise. Instead of there being

hypertrophy and induration of the cervix, as in inflammatory ulceration, there is, on the contrary, *loss of substance*, an ulcerated excavation, more or less deep, according as the disease is more or less advanced. It is distinguished from ordinary cancerous ulceration—which also, in its advanced stages, gives rise to loss of substance—by the absence of the voluminous indurations, or hardened inequalities of surface, produced by the deposit of cancerous structure. In advanced ulcerated cancer of the cervix, likewise, the organ is generally glued, as it were, to the adjacent tissues, and consequently immovable, or nearly so, which is not the case in corroding ulcer, even where the cervix has been destroyed, and the body of the uterus deeply excavated. This malady is so rare, that in many years of extensive hospital practice, not a single case may be met with.

The cauliflower excrescence, although more common than the preceding affection, is nevertheless of rare occurrence. It is a kind of malignant, fungoid, erectile polypus of the uterine neck, generally the seat of abundant haemorrhage; it does not originate in ulceration of the cervix, nor does it present an ulcerated surface. The watery discharge which characterizes the first stage, and

the sanguineous discharge which subsequently sets in, appear to be both secreted by a kind of serous cyst, which envelopes the tumour. Both the above forms of malignant disease were first well described by Dr. John Clarke. They may be easily recognised, through their physical characters, by any one who is acquainted with their existence, and with uterine diseases generally.

The other forms of malignant disease of the cervix—scirrhous, encephaloid, and colloid cancer—are merely anatomical varieties of cancer, properly so called, scarcely, if at all, susceptible of being distinguished from each other during life. Such accuracy of diagnosis is not, either, necessary, as, if attained, it would merely slightly modify our prognosis as to the probable duration of the disease, but would not render us more capable of successfully treating it. It is of the greatest importance to be able to recognise a cancerous affection of the cervix, to distinguish between it and an inflammatory one, as the latter is curable in all cases; whereas the former is probably always incurable. It is, I firmly believe, because this diagnosis is not always properly established, because chronic inflammatory ulcerations and hy-

pertrophies are sometimes considered to be cancerous, that many writers on this disease adopt the idea of its frequent curability in the early stages. I have no hesitation in making this assertion, because, although my opportunities of observation were for some years very great, I do not remember having seen an instance of well-recognised cancer of the cervix following any other progression than an unfavourable one, whatever may have been the treatment adopted.

The curability of uterine cancer, in its advanced stage, when ulcerated, is not, to my knowledge, professed by any influential writer. It is in the early stages, when the disease is merely a hard tumour, that it is deemed curable, and it is precisely in this period of the malady that the diagnosis is the most difficult.

In the first stage of the disease, the uterine neck becomes very hard, the indurated tissue being irregular in its surface, lobulated, presenting shot-like tubercles. It is not, however, the hardness of the diseased cervix which indicates the invasion of cancer, for, as we have seen, cases of non-malignant inflammation may be followed by stony hardness of the organ, or of a part of it, but the *irregularity* of

the hardened surface, and the existence of the tubercles, which project here and there. This irregularity is occasioned by the deposit, or generation, of cancerous tissue, taking place irregularly, capriciously—a fact which is equally true when applied to its generation in other parts of the economy. When induration of the cervix, or of a part of it, is the result of chronic inflammation, there is always, on the contrary, a smooth, even surface. There are, nevertheless, instances in which the distinction is difficult to make, when the cervix has been deeply fissured by difficult labours or miscarriages. (See Cases 10 and 18.) In such instances, the indurated organ may be divided into several lobes, and present an uneven, and apparently irregular surface, although merely chronically inflamed. On a closer examination, however, it will be found that the fissures which separate the lobes radiate round the cavity of the os as a centre, which is not the case in cancerous tumours, and that each separate lobe is perfectly smooth in itself, and free from tubercles or superficial inequalities.

If these data were generally known, and always kept in mind, errors of diagnosis in the first stage

of the disease would seldom be made; but I believe that such is not the case, and that mere induration of the cervix, particularly if the organ is lobulated, is not unfrequently taken for cancer, and treated as such. When this occurs, it is not surprising that the disease should give way under rational treatment, and that practitioners who fall into this error should conscientiously be able to bring forward cases to prove that they have cured incipient cancer.

The irregular, lobulated, shot-like induration of the cervix uteri, which I have stated really to indicate the existence of cancerous disease, is described by the pathologists who have recently written on the subject, as if it existed and were generally appreciable in the first stage of the disease. This has long excited my surprise, as it is opposed to the result of my personal experience. During the period I resided in the Paris hospitals, very many females affected with uterine cancer were under my care,—for a greater or less length of time,—most of whom stated that they applied for the first time for medical advice, and yet I cannot bring to mind more than two or three cases, at the utmost, in which the cancerous

disease was in this the primitive stage ; or, in other words, had not ulcerated. I have, indeed, been led to believe, from this circumstance, either that the primary stage of uterine cancer is indolent, and accompanied, generally speaking, by so little uneasiness or pain as not to induce the patients to apply for relief, or otherwise, that the malady passes so rapidly to the period of ulceration as scarcely to allow them time to seek assistance. In support of this latter view I may remark, that in the mouth cancerous tumours speedily ulcerate. However this may be, it is certain that in Parisian hospital practice, although the incipient stages of all other forms of uterine disease are frequently met with, that of cancer is very seldom to be seen.

When once ulceration has occurred, the diagnosis becomes much easier. This is the more fortunate, from the fact that if my experience can be depended upon, it is not, generally speaking, as I have already stated, until ulceration has taken place, that patients apply for relief. In cancerous ulceration of the uterine neck, there is generally loss of substance ; the ulcerated surface is also hard, and presents numerous lobules, tubercles, hard

ridges, disseminated with the utmost irregularity, and presenting, as a rule, that stony hardness which is only occasionally met with in inflammatory induration. A person accustomed to uterine investigations will not mistake for a moment the nature of the lesion, so peculiar is the sensation produced to the finger by the irregular ulcerated and indurated surface. The disease very frequently extends to the vagina; and when this is the case, the hardened ridges and lobules, formed by the generation of cancerous tissue, are continued on to the vaginal cul de sac, and descend more or less along its parietes. This is never the case in inflammatory induration or ulceration, the vagina never becoming indurated, however much, or however long, the cervix and uterus may be diseased. In cancerous ulceration, the cervix and uterus are nearly always immovable in the pelvis, having become adherent, glued, as it were, to the surrounding organs and tissues, whereas this very seldom occurs in inflammatory ulceration, and never to any great extent.

The ulcerated surface secretes a sanious ichor, often in great abundance. This secretion is peculiarly offensive to the smell. On withdrawing

the finger, the odour which attaches itself to it is alone sufficient, in forty-nine cases out of fifty, to establish a diagnosis. It is most nauseating, so much so as to leave an impression on the olfactory nerves, which it often requires hours to dispel. The discharge from inflammatory ulceration may be very offensive, owing to want of cleanliness, or to the nature of the secretion, but it seldom, if ever, presents the horribly offensive odour of a cancerous uterine discharge, if I may judge, at least, by my own experience.

If examined with the speculum, the ulceration will be found to present the usual appearance of cancerous ulceration—an irregular jagged sore, covered with fungous granulations, and sometimes with a greyish pultaceous film. I have, however, very seldom employed the speculum in these cases, as its use is attended with considerable danger from haemorrhage. I have known of several instances in which tremendous haemorrhage has followed the introduction of this instrument, so that I scarcely dare resort to it. Several cases of this kind have come under the immediate observation of M. Emery of St. Louis. The explanation of the fact is obvious. The parts in which the can-

cerous degeneration takes place lose their elasticity and pliability, and become as inextensible as a board. This being the case, the introduction of the speculum is liable to rupture, to fissure the diseased organs, and thus to give rise to irrestrainable haemorrhage.

The general symptoms of uterine cancer are too well known for it to be necessary to enter into any details on the subject. I will merely remind the reader, that all the general and local symptoms which accompany ulcerated cancer may also be observed in severe chronic inflammatory ulceration. Thus, in one of the cases which I have narrated, (Case 10,) we find severe hypogastric, lumbar, and femoral pains, sanguinolent foetid discharge, occasional haemorrhage, extreme emaciation, yellow tinge of the skin, hectic fever, vesical and rectal irritation, and yet the disease was merely inflammatory. Cases such as this, show that although in the generality of instances the presence of the above symptoms is but too significant of advanced malignant disease, yet implicit reliance ought not to be placed on them alone.

Having now concluded the pathological history

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of inflammation of the cervix uteri, and shown how it is possible to distinguish it from cancer, and to establish a correct diagnosis, I shall proceed to the most important part of the subject—the treatment. I hope to be able to prove that the distinctions which I have admitted, and the details into which I have entered, will all find their application in the treatment of this distressing affection.

CHAPTER V.

T R E A T M E N T.

THE TREATMENT OF INFLAMMATION AND ULCERATION OF THE UTERINE NECK IN WOMEN WHO HAVE NOT BORNE CHILDREN.

As I have more than once stated, the distinction which I have established between inflammation and ulceration of the cervix in women who have not borne children, and in those who have, is merely valuable as calculated to impress on the mind the superior gravity of the disease in the latter. In reality, the malady is the same, with the exception that in women who have not conceived, in the great majority of cases, the inflammation does not penetrate into the deep tissues of the cervix, but remains superficial, and, consequently, does not give rise to engorgement, or

inflammatory hypertrophy; whereas, in women who have borne children, on the other hand, as long as menstruation persists, inflammation of the cervix is generally followed by inflammatory hypertrophy of the cervix, and by the whole train of symptoms to which it gives rise.

INFLAMMATION OF THE CERVIX WITHOUT ULCERATION.

Inflammation of the mucous membrane covering the cervix, as my readers are now aware, seldom lasts long without being followed by ulceration, so that, generally speaking, it is an ulcerated surface, of greater or less extent, that we are called upon to treat. A practitioner who is on the look out for these affections will, however, occasionally meet with instances in which the surface of the cervix is inflamed without ulceration having supervened, and it should then be his aim to check the inflammation, so as to prevent it passing on to ulceration.

The remedies usually resorted to in general vaginitis are here indicated. The most efficacious is, undoubtedly, the solid nitrate of silver, lightly drawn over the inflamed cervix, and over that part

of the superior parietes of the vagina which generally participates in the inflammation. The peculiar influence which the nitrate of silver exercises over inflammation of mucous membrane is recognised by nearly all practical medical men, and its use, either in solution, as an ointment, or solid, is daily becoming more general. On the cervix and on the vagina it exercises the same beneficial effect as on the eyes, the mouth, the urethra, &c., and proves a most valuable remedial agent.

After the mucous surface has thus been slightly cauterized, emollient or slightly astringent injections (acetate of lead, or sulphate of zinc) must be used three or four times a day; complete rest must be enjoined; sexual congress strictly forbidden; and the general health attended to. The disease is nearly always so entirely a local one, that it is not necessary to resort to any general medication, unless the state of the health seems to demand it. A brisk purgative or two, however, can do no harm, and will often do good.

On the parts being again examined, in the course of a week or ten days, the inflammation will generally be found to have subsided, unless

it co-exist with blennorrhagia, in which case it will prove much more difficult to eradicate, and requires the same treatment as in the other regions of the sexual organs. Sometimes, nevertheless, it will be found advisable or necessary to re-apply the nitrate of silver to the mucous surface a second or a third time. This occurs more especially when the injections have been improperly performed, as is usually the case if the patient is not instructed as to the way in which they should be used. Females generally use vaginal injections in a stooping posture, and the result is, that the injected fluid falls out of the vagina, without having attained the uterine neck. This M. Ricord has proved to demonstration by the following experiment:—With the assistance of the speculum he introduced a piece of lint into the upper part of the vagina, and then, carefully withdrawing the instrument, told his patient to use the injection syringe in the usual stooping position. On afterwards extracting the lint he found that it had not even been moistened.

To obtain the full effect of the injection, the patient should recline on the side of a bed, or of

a lounging chair, elevating the pelvis, so as for the vagina to form an inclined plane, of which the cervix is the most dependent point. The vagina thus retains the injected fluid, like a vase; it penetrates gradually into every part, and remaining in contact with the inflamed tissues for a few minutes, exercises a decided influence on them.

Although the above treatment is certainly the most efficacious, and the best calculated soon to subdue the inflammation, it must not be supposed that direct cauterization of the mucous membrane by means of the speculum is indispensable. Astringent injections properly used, or even emollient injections, rest of the organs, and attention to regimen, will often suffice to prevent ulceration, and to subdue the inflammation, although not in so short a time, or so surely, as the former treatment. Owing to the anatomical disposition of the parts, inflammation of the cervix is necessarily rather difficult to conquer. The vagina being a contractile canal, a kind of longitudinal sphincter, naturally closes on itself in its entire extent, and thus embraces the uterine neck, as it were, by its upper portion. The result of this disposition is, that when the mucous surface is

inflamed, the muco-pus secreted—unless very abundant, which it is not in slight affections—stagnates round the cervix, where it is always found in greater or less quantity on the introduction of the speculum, and tends to keep up the irritation. This is one of the reasons why a slight inflammation—which, on an exposed surface, or on one that could cleanse itself of the morbid secretion, would run through its phases in the course of a few days—is perpetuated, and leads nearly inevitably to ulceration.

Not only is it *possible* to treat successfully non-ulcerated inflammation of the cervix without the introduction of the speculum, merely by emollient and astringent injections, rest, and attention to general health, but even slight ulcerations, unaccompanied by general inflammatory hypertrophy, will give way under the same treatment. In order to establish this fact, I have repeatedly, after ascertaining with the speculum the presence of a superficial ulceration, treated the patient merely as described, without touching the ulcerated surface with caustic, and have found, in many instances, the inflammation diminish, and the ulceration decrease, and at last cicatrize. It is

only, however, in cases of very slight ulceration, unaccompanied by general hypertrophy, that rest combined with emollient and astringent injection, succeeds; and even in these cases the treatment is much more tedious and uncertain than if cauterization of the ulcerated surface is at once resorted to and repeated as required.

Although, therefore, it is not impossible to treat the slighter forms of inflammation and ulceration of the uterine neck without the use of the speculum, it is very desirable that the attempt should not be made if the scruples of the patient can possibly be overcome. I may also remark, that however careful and minute the examination made with the finger may be, it can only enable us to form a surmise as to the precise nature and extent of the disease, and that, consequently, unless we bring the speculum to our assistance, we must treat our patient, in a great measure, in the dark. When once, on the other hand, the ice has been broken, and the speculum has been brought into use for the purpose of diagnosis, its further use, as a means of treatment, is not likely to meet with any obstacle on the part of the patient, and still less on that of her friends.

INFLAMMATION OF THE CERVIX WITH ULCERATION.

From what precedes, my readers will be prepared to find me lay down as an axiom, that the basis of the treatment of inflammatory *ulceration* of the cervix uteri is, the cauterization of the ulcerated surface. If the inflammation has not penetrated to the deep tissues of the cervix, and there is no general inflammatory hypertrophy of the organ, *superficial* cauterization, combined with emollient and astringent injections, rest both of the organ and of the system, and attention to the general health, is all the treatment that is required, and will generally effect a cure in from four to six or eight weeks. We will examine each of these therapeutic agents in detail.

Superficial Cauterization.—The beneficial influence of astringent applications and of superficial cauterization, in diminishing the irritability of inflammatory sores, in modifying the character of unhealthy ulcerations, and in repressing the redundancy of healthy granulations, is now an universally recognised principle in surgery. It is more especially in the treatment of solutions of continuity existing on the mucous surfaces, at

the orifice of the various openings of the body, that this principle holds good; thus it is that we find cauterization to be the principal resource in all ulcerations of the nares, mouth, fauces, and anus, as well as in those of the external genital organs, both of the male and female. In all these situations, cauterization presents an additional advantage to those which it offers on a free ulcerated surface. The eschar which forms on the ulceration protects it efficiently from the contact of the various fluids excreted through, and secreted by, the organ, the mucous surface of which is attacked, and thus allows the process of reparation to take place undisturbed. In ulceration of the uterine neck, the eschar protects also the abraded surfaces from the contact of the pus which it itself secretes, and in which it bathes, owing to the anatomical disposition of the parts to which I have already alluded.

The progress of the inflammation and ulceration is, generally speaking, at once arrested by the cauterization. The congestion and redness of the cervix diminish visibly, the granulations become smaller and healthier, and the purulent secretion assumes the character of laudable pus,

if it has not presented it before. When the cauterization is suspended, the ulceration will, however, often remain stationary, even if other measures (injections, &c.) are resorted to; and if left entirely to itself it is nearly certain to relapse, however advanced the healing process may be.

The first symptom of cicatrization nearly always takes place at the circumference. The margin of the ulcerated surface loses its well-defined character, and mingles imperceptibly with the red, inflamed, but not ulcerated, mucous membrane. As the latter returns to its natural pale colour, a film of white cicatricial tissue appears around the ulceration, and gradually progresses towards the centre. Towards the end of the treatment, points of cicatrization will occasionally appear in the centre of the ulceration, and by their gradual extension abridge the process. When the ulceration is cicatrized, it presents a pale rosy, or ash-coloured hue, which is pretty nearly the natural colour of the healthy cervix.

The agents used for the cauterization of the ulcerated cervix are various. The principal are the nitrate of silver and the acid nitrate of mer-

cury. The latter is exclusively employed by many Parisian practitioners, among whom I may name M. Emery. It is a dissolution of deutonitrate of mercury in nitric acid, is much in use for the treatment of foul ulcers in the French hospitals, and has been adopted by the French codex. It is prepared in the following manner:— To four parts of mercury add, in a retort, eight parts of nitric acid; when the dissolution has taken place, reduce to nine parts by evaporation. It is a very dense dissolution of deutonitrate of mercury in an excess of acid, and contains 71 per 100 of the deutonitrate. This agent is a powerful caustic, giving rise to a white eschar, which does not fall for five or six days. When the inflammation is intense, the ulceration large, and the granulations redundant or unhealthy, it exercises a very prompt and beneficial influence, generally cleansing and modifying the sore in one application. In very slight ulcerations, however, I think it is too powerful a remedy, and that the solid nitrate of silver answers the purpose much better. (See Case 2.)

When recourse is had to the nitrate of silver, its application may be repeated every fourth or

fifth day, whereas the acid nitrate of mercury should not be applied oftener than once a week. The eschar formed by the former, being much more superficial than that formed by the latter, falls much sooner. In either case, whenever cauterization is resorted to, whatever be the agent, the blood or mucus which covers the cervix must be wiped off before the caustic is applied, otherwise the greater part of its power is lost in coagulating these fluids. This can be done conveniently by means of a little lint or sponge, held in a pair of long forceps. Those which I use are thin, about ten inches in length, and made on purpose. The solid nitrate of silver, fixed in a long porte-caustic, must be drawn two, three, or four times over the ulcerated surface, according to the effect wished to be obtained.

In order to apply a fluid caustic, the following plan should be resorted to:—A small thin stick, about a foot in length, having been chosen, is formed into a brush, by inserting between its divided extremities a little wool, lint, or old linen, which is then fastened by a few turns of thread. These little brushes may be made *ex tempore*,

and being of no value, can be thrown away when they have been used. The brush, having been introduced into the acid, should be pressed against the rim of the bottle, in order that it may be merely moistened with the caustic, and then drawn over the ulcerated surface. A little water must then be injected into the speculum before withdrawing it, in order to absorb any super-abundant acid. This precaution is not absolutely necessary, if care has been taken not to use too moist a brush. Owing to the powerful cauterizing properties of acids, it is perhaps as well, however, for a person unaccustomed to the treatment of these diseases, to adopt the precaution. In that case a syringe, holding about half-a-pint of water, should be used, and the water injected before the speculum is withdrawn. By changing the position of the pelvis, the fluid may afterwards be easily made to fall into a basin. I often merely pour a little olive oil into the speculum; the effect obtained is the same. When the nitrate of silver is employed, no precaution is necessary. The contact of the uncombined caustic with the neighbouring parts, nearly always inflamed, can only be productive of benefit. In cauterizing

the cervix, the speculum must be *firmly* applied to the parts, so as to protect the vagina from the action of the caustic.

For the last few years the hydrate of potassa, or fused potassa, has been a very favourite caustic in Paris. Combined with quicklime, it has been run into long lead moulds, or pencils, which render its use as easy as that of a stick of nitrate of silver. M. Boys de Loury, at St. Lazare, scarcely employs any other preparation in the cauterization of uterine ulcerations. (See Case 11.) Potassa, in this form, is a very powerful and valuable caustic, but requires to be managed with great care; in the hands of a careless practitioner it might do great mischief; I merely resort to it when the nitrate of silver or the acid nitrate of mercury fail to produce the desired effect. When potassa fusa is thus used, either a little water must be injected subsequently, or otherwise a ball of lint must be placed in contact with the cervix, and left there for a short time, in order to prevent accidental cauterization of the vagina.

There are, no doubt, many other chemical cauterizing agents which would do as well, or

nearly as well, as the above, such as nitric and hydrochloric acids, &c., but their use has not, as yet, been sanctioned by experience. In my own practice, for the purposes of superficial cauterization, I confine myself to the nitrate of silver, the acid nitrate of mercury, and, occasionally, the caustic potassa.

I must not omit to mention the mode of cauterization followed for the last few years by M. Jobert, (de Lamballe,) the talented St. Louis surgeon. He cauterizes nearly all severe uterine ulcerations with the actual cautery. This plan of treatment I shall fully discuss when speaking of the treatment of the more severe forms of inflammation of the cervix. So energetic a remedy, I may even now state, is clearly not indicated in the slight ulcerative inflammations, unaccompanied by general hypertrophy, of which I am at present speaking.

In concluding what I have to say for the present on the subject of cauterization, I may remark, that the application of caustic to the cervix gives little or no pain, whichever may be the one employed. The actual cautery itself is, indeed, scarcely felt more than the nitrate of

silver. Considering the almost total absence of spinal nerves in the cervix uteri, we have no reason to be surprised that this should be the case. As to the danger of metritis and peritonitis, on which some eminent practitioners who have written on the subject have laid so much stress, there is not a vestige of foundation for the fears which they have expressed. I have certainly seen cauterized, or cauterized myself, several hundred females, and have never yet known a really serious accident follow. Cauterization, such as I have described it, may give rise to some few hysterical symptoms in nervous females, but that is all.

It must, however, be well understood, that I am speaking of cauterization properly and discreetly performed by well-informed and prudent medical men. The strong caustics are at all times dangerous weapons in the hands of ignorant or careless practitioners, especially when thus applied in the depths of the human economy. If the nitrate of mercury or the potassa fusa were applied to, or allowed to run on the vagina, which is as sensible as the cervix is insensible, it would occasion severe pain and inflammation, perhaps retraction of tissue, or even more serious

consequences. Such results have occurred, in France, in the practice of unskilful medical men.

Injections.—Injections act in two manners:—first, they carry away the muco-pus secreted by the inflamed and ulcerated surface; thus preventing it stagnating, and increasing the irritation; and, secondly, they act as therapeutic agents, by their contact with the diseased surfaces. In those cases in which the inflammation is confined, or nearly so, to the uterine cervix, the inflamed surfaces having been touched with a caustic, emollient injections are alone needed, such, for instance, as milk and water, infusion of linseed, decoction of mallow or marshmallow, &c.; tepid or cold water alone, indeed, would be quite sufficient in most cases.

If the inflammation is more general on the parieties of the vagina, astringent injections should be resorted to. Those which I use principally are dissolutions of acetate of lead, of sulphate of zinc, and of sulphate of alumina and potassa.. I begin with about one drachm of either of these salts to a pint of water, and increase the proportions according to the results obtained.

Although, when there is no inflammatory hy-

per trophy, the obscure pains experienced in the hypogastric and lumbar regions are but slightly increased by walking, yet every kind of exertion should be refrained from during the treatment. The cervix is congested, if not engorged, and, in all probability, it is not so firmly embraced by the vagina as not to be more or less frictioned against the parietes of that organ during progression. However that may be, it is certain that rest, in the horizontal position, is very beneficial, and that the quieter a patient remains during the treatment, the easier it is to effect a cure, even in comparatively slight cases. This I have often seen in hospital practice; women, whom we could not cure as out-patients, got well in a few weeks when once in the hospital. There was, however, another reason which contributed to render the cure easier with patients in the hospital than with those who were attended from out of doors. It was possible to enforce with the former sexual abstinence, which it was only possible to recommend to the latter. It is, however, indispensable that this should be observed, for otherwise it is in vain to look for a speedy recovery. What the medical practitioner does, the husband undoes.

Unfortunately, although intercourse is rather painful to a female thus affected, it is not sufficiently so to act as a bar.

General treatment.—Throughout the treatment it stands to reason that the general health must be attended to. Every function must be examined, and if an indication presents itself it must be obeyed. If the disease has existed for a length of time, and abundant leucorrhœa has long been present, as is usually the case, the general health will nearly always be found to have suffered secondarily. In that case the cephalalgia, palpitations, cardialgia, anorexia, insomnia, weakness, &c., being evidently the result of the disease, do not *imperatively* require any particular treatment. As the local affection is ameliorated, and the discharge decreases, the general health rallies, and the symptoms alluded to gradually give way, *subtractâ causâ, tollitur effectus*. It is, however, frequently possible for the physician to assist the efforts of nature, which he must do as he best can, according to the peculiarities of each case, and the laws of rational therapeutics. Tonics, and the various preparations of iron, are the medicines which are the oftenest beneficial.

It is worthy of remark, that the treatment which I have laid down, so far from interfering with the menstrual function, on the contrary, facilitates it, by diminishing the inflammatory congestion of the cervix and of the uterus itself. The flow of blood, after a few weeks' treatment, is consequently much easier, rather more abundant, and often occurs a few days earlier than usual. It has been stated, by most recent writers on uterine disease, that cauterization with the nitrate of silver exercises a peculiar influence over the menstrual flux, accelerating the manifestation of the latter in such a manner as to contraindicate its use. This statement, which originated with M. Lisfranc, has, I think, merely been copied from him by successive writers. The physiological action of the nitrate of silver on the uterine function has always appeared to me precisely similar to that of the other caustics. The only precaution to be adopted during menstruation, is to suspend the astringent injections and cold hip-baths, for which injections with warm water only should be substituted. A day or two after the secretion has ceased, the treatment may be recommenced.

The simple treatment which I have above described will nearly always suffice to cure inflammation of the cervix, accompanied or not by ulceration, when that inflammation has not penetrated deeply into the tissue of the organ, and given rise to chronic inflammatory hypertrophy. When this is the case, as it generally is with women who have borne children, and sometimes even with those who have not, various other therapeutic measures are frequently necessary. We have no longer inflammation of the *mucous membrane* of the cervix only, to contend with, but inflammation of the entire organ—and a more energetic treatment may be, consequently, indispensable.

CHAPTER VI.

THE TREATMENT OF INFLAMMATION, ULCERATION, AND INDURATION OF THE UTERINE NECK IN WOMEN WHO HAVE BORNE CHILDREN.

ALTHOUGH I have elsewhere entered at length into the history and symptoms of inflammation and induration of the uterine neck in women who have borne children, I shall now reproduce the principal features of this form of the disease, as it is absolutely necessary that they should be borne in mind, in order that what I have to say respecting the treatment may be understood.

In acute and recent cases of inflammation of the cervix in women who have borne children, the inflammatory nature of the hypertrophy is well marked by the intense redness and heat of the enlarged organ; but in chronic disease, these symptoms subside, leaving a passive hypertrophy,

which appears to depend principally on a modification of the nutrition of the part. The redness is no longer vivid, and the heat is scarcely, if at all, greater than natural ; indeed, the inflammation may be said to have ended in induration. Even in these cases—in which the disease has reached, as it were, one of its natural terminations—the ulceration of the surface of the organ often persists. This ulceration is kept up by the frictioning of the hypertrophied organ against the parietes of the vagina, and by the other causes which we have enumerated.

The chronically enlarged cervix is extremely hard and resistant to the touch in its entire extent, and has not the latent elasticity which may still be observed in acute inflammatory hypertrophy. In either case, the size of the organ varies from that of a walnut to that of a large egg. The larger the volume, the more distressing are the symptoms produced by the prolapsus and retroversion of the cervix, so that the life of a woman who is labouring under hypertrophy of the cervix is often a burden to herself; she is never free from painful and disagreeable sensations. Chronic hypertrophy, when left to itself,

will last for years, probably, indeed, until the cessation of menstruation is gradually followed by atrophy of the uterine system.

If the hypertrophy is considerable and general, the prolapsus of the cervix is constant, the irritation great; and ulceration and abundant leucorrhœa are nearly always present. If inconsiderable, or limited to one region of the cervix, the surface of the organ may be free from disease, and the uterus may prolapse only after long standing, or walking, or great fatigue of any kind. These are by no means uncommon states. Indeed, I have no hesitation in saying, that a very large proportion of the cases, both of slight and of severe uterine prolapsus which are met with in practice, and for which pessaries are so improperly used, are the result of chronic hypertrophy of the uterine cervix.

When the inflammation and induration are the immediate or even proximate result of miscarriages, difficult labours, or of deep lacerations of the organ, there is frequently more or less inflammation of the uterus itself, (Case 10.) If metritis is thus present, general antiphlogistic measures, such as bleeding from the arm, &c., may be indi-

cated. So active a treatment, however, will seldom be found necessary. Generally speaking, the patients have been exhausted by flooding, by mucoso-purulent discharges, by previous medication, and are not in a state to bear very energetic measures. Complete rest in bed, diluents, tepid hip-baths, emollient injections, poultices to the abdomen, and a few leeches to the hypogastric or iliac regions, will nearly always subdue the general inflammation of the uterus in the course of a few days, so as to admit of examination with the speculum.

As long as the uterus itself is acutely inflamed, no examination with the speculum should be attempted, as it would be very painful; but as soon as these inflammatory symptoms have subsided, it must be at once resorted to, as nothing will tend so much to allay the irritation of the uterine system as cauterization of the ulcerated surface. So far from cauterization in these cases, even when there is still acute inflammation of the cervix, and slight subacute inflammation of the uterus, endangering the life of the patient, as has been asserted, by exposing her to metritis, or metro-peritonitis, it invariably

diminishes the inflammation both of the cervix and of the surrounding parts. It appears to exercise the same beneficial effect over the surrounding uterine inflammation, that cauterization of an ulcer of the cornea exercises over ophthalmia. It is, indeed, most evident to me, that those who have forbidden cauterization of an ulceration of the cervix until the inflammation of the organ is quite subdued, must have been actuated entirely by *à priori* ideas, and not by the results of their own experience.

When the uterus itself is inflamed, there is nearly always more or less general febrile reaction, whilst it is only met with in very acute and very severe cases of inflammation of the cervix alone. If febrile symptoms are present, the treatment must necessarily be modified accordingly. When, as is the case with the great majority of patients, the inflammation and induration is confined to the cervix, general anti-phlogistic treatment is scarcely ever required.

The measures which I recommended in inflammation and ulceration, unaccompanied by general induration, (viz., superficial cauterization, injections, rest, and a light diet,) will very often alone

suffice both to cure the ulceration and to resolve the induration. Of this I became thoroughly conscious when I was house-physician to M. Emery, at St. Louis. This practitioner scarcely ever uses any other means in the treatment of the numerous cases in his wards, however severe; and to my surprise I repeatedly saw patients who presented very considerable induration of the cervix, and for the treatment of whom I should have thought more energetic means necessary, rapidly getting well.

I soon, however, ceased to consider the frequent success of this simple treatment extraordinary, on becoming convinced, as I subsequently did, that in most cases the inflammatory induration itself is occasioned and kept up by the ulceration. It stands to reason, such being the case, that as the ulceration diminishes and cicatrizes, so will the inflammatory induration of the cervix often diminish and disappear. As illustrating this important fact, I may refer my readers to Cases 4 and 7.

This, however, only occurs when the nutrition of the engorged cervix has not been deeply modified by the subacute inflammation of which it has

perhaps been the seat, for months, or years. Not unfrequently, especially in very chronic cases, the hypertrophy only diminishes to a certain extent under the above treatment, and even that very slowly, and then remains stationary, whether the ulceration heal or not. It is evident, therefore, that the same confidence cannot be placed in this plan of treatment when inflammatory hypertrophy co-exists with ulceration, as when it does not. It is often insufficient to effect a cure in the first form of the disease, whereas in the latter it is always successful. Even in recent acute cases, the inflammation of the engorged cervix is sometimes too intense to be subdued by such means. The hypertrophy may diminish, and the ulceration may heal, and yet the cervix remain the seat of subacute inflammation, and larger than in the natural state; it is still the seat of general inflammatory induration.

As long, on the other hand, as the hypertrophy and induration of the cervix remain, the patient cannot be said to be cured, whether the ulceration be healed or not. In inflammation of the cervix uteri, the hypertrophy is certainly one of the most important elements of the disease, occasioning, as

it does, most of the distressing symptoms which often render the patient's life a burden to her—viz., the uterine prolapsus, the sensation of pelvic heaviness and bearing down, the severe lumbar pains, the constipation, the vesical and rectal irritation, &c. A treatment, therefore, which, like that above described, heals ulceration of the uterine neck, but leaves, in many cases, the hypertrophy, cannot be considered curative.

Yet such is the plan now pursued by most of those French practitioners of the present day who have paid attention to uterine diseases. They are acquainted with the symptoms of inflammation and ulceration of the cervix, readily examine their patients, and having discovered an inflammatory ulceration, generally manage to cure it, but they pass over the hypertrophy and induration which still remain after they have brought their treatment to a close. The hypertrophy which they found at the onset has diminished considerably under their eyes, and what still exists, they suppose will disappear of itself in the course of time. With some patients such really is the case, but with most it remains, and if at all considerable, or if the patient's life be an active one, perpetuates

prolapsus, anteversion of the uterus, &c., and often brings back the ulceration, the leucorrhœal discharge, and all the other symptoms which had only temporarily disappeared.

I may here remark that it was whilst endeavouring to account for the occasional tenacity of ulceration of the cervix, for the frequency of relapse in some patients, and for the comparative ease of cure and freedom from relapse in others, that I became convinced—firstly, that the difference depended entirely on the presence or absence of general inflammatory hypertrophy of the neck, and secondly, that chronic inflammatory hypertrophy, whilst extremely common with women who had had children, was, on the contrary, very uncommon with women who had never conceived.

Having explained the gravity of general hypertrophy of the uterine neck, and having also established the fact, that, when it exists, the treatment which will, in all probability, cure the concomitant ulceration, will often diminish the induration, but not dissolve it, I shall be understood when I state that—*whenever* general induration exists, it must from the first be taken seriously into account in the treatment.

As we may always anticipate the possibility, and often the probability, of the induration becoming permanent, no pains ought to be spared to prevent such an event; confirmed chronic indurations of the cervix being excessively difficult to remove. In the first instance, therefore, if we find, on being called in, that general induration exists, whether the disease be recent or not, the case should be considered a serious one, and everything should be made to bend to the treatment.

Complete rest, which, in ulceration unaccompanied by induration, I stated to be only extremely desirable, is now indispensable. Indeed, if the patient can be prevailed upon to keep her bed for a few weeks, it is much the best plan. When walking, standing, or even sitting, the enlarged cervix drags down the uterus; whereas, when the patient is lying down, this does not occur. If there is a good deal of hypogastric pain; large linseed poultices applied to the hypogastrium, and changed occasionally, will often give great relief. These poultices should be made thin, or otherwise their weight is painful. Tepid or cold hip-baths twice a day are useful adjuncts to the treatment. There is great difference

of opinion respecting the influence of hip-baths over uterine diseases, some practitioners contending that they give rise to congestion of the pelvic viscera, and do harm. If used warm, this may be the case, but when tepid or cold, they do not produce any such effect. They are habitually employed by M. Gendrin in the treatment of chronic pelvic inflammations, and always with good results, as I can testify, after witnessing for several years the effects which they produce.

In these cases, cauterization of the ulcerated surface may generally be resorted to from the first, but the action of the nitrate of silver is too superficial, and the acid nitrate of mercury, or caustic potassa, should be preferred. Emollient or astringent injections should also be used. When the inflammation is confined to the neck, emollient injections will suffice; if the vagina is also inflamed, astringent injections are indicated. Attention must be paid at the same time to the condition of the bowels, and to the general health.

The treatment may be confined to these measures for two or three weeks, during which time the influence of the medication followed must be

narrowly watched. If the ulceration becomes less angry-looking, if the granulations assume a healthier appearance, and if the hypertrophy of the neck appears rapidly to decrease, the treatment may be continued, as it will probably prove quite sufficient to effect a complete cure. But if this is not the case, if the amelioration which at first takes place ceases, or if the ulceration appears inclined to heal without the induration giving way, other measures must be resorted to.

The most efficacious is the application of leeches directly to the uterine neck itself. They are extremely useful agents in subduing deep-seated chronic inflammation in this region. The following is the easiest way to apply them: after introducing an ordinary conical metal* speculum, wipe off the mucus which covers the surface of the cervix with a little lint or sponge, and then place the leeches in the interior of the instrument. Over the external orifice of the speculum, spread a piece of linen, which depress with the finger into the speculum. In the concavity

* Glass specula should never be used. They may break in the vagina, however strong.

thus formed, place some lint or cotton, and then, with the forceps, push the whole towards the uterine neck. The linen carries the leeches before it, and presses them against the os uteri. On pulling out the linen and the lint, with which the speculum was plugged, in the course of about ten minutes it will nearly always be found that all the leeches have taken. They generally fill well in this situation, and the flow of blood is often considerable after they have fallen.

The beneficial influence of leeches when applied to the cervix, like that of all other therapeutical agents used in the treatment of uterine disease, has been strenuously denied. I have, however, no hesitation in stating, that no other remedy with which I am acquainted possesses the same efficacy in preventing deep-seated inflammation of the cervix from passing into a state of chronic induration, a state incurable except by the most energetic means—which most practitioners are afraid to resort to. During the three years that I was the pupil, or house-physician, of M. Gendrin, at La Pitié, I either applied leeches to the cervix myself, or had them applied by my dressers, several times a week, to

different women; so that I have certainly had a good opportunity of forming an opinion as to their value. In private practice, I have since derived the same benefit from their use that I did on hospital patients. Six, eight, ten, or twelve leeches may be applied at once, according to the effect wished to be produced, and they should be re-applied several times, at intervals of five, six, eight, or ten days, when necessary, until the desired effect is produced. The leech punctures always heal readily. Their bite is not felt by the patient, unless they fix on the vagina, which they cannot do if the speculum is properly introduced. This instrument must be held by the patient, or the nurse, while the leeches are on. They generally fall off, but it is sometimes necessary to bring them away, after they have filled.

The benefit derivable from leeches in inflammation of the cervix uteri has nothing in it calculated to surprise us; indeed, it would only be surprising if they were not of use, when we consider what valuable assistance they give in all circumscribed inflammations of other parts of the body.

If all these measures, coupled with attention to

diet, (which must be light,) and to the general symptoms, should fail to heal the ulceration and to dissolve the induration, or, healing the ulceration, should leave the induration behind, the patient ought not on that account to be abandoned as cured, or as incurable, as is generally the case, nor should pessaries be used to support the prolapsed parts.

I have scarcely ever seen any good result from the use of pessaries. They are, I believe, in the great majority of cases, a lame, impotent, irrational means of treating the disease against which they are directed (*prolapsus*); and are generally, if not always, productive of more harm than good. These remarks apply in full, at least, to all cases in which the *prolapsus* is the immediate result of hypertrophy of the cervix; in my opinion, by far the most numerous. Without entering at length into the pathology of *prolapsus uteri*, I may mention as my firm conviction, that the cases in which it is to be attributed to laxity of the lateral ligaments, to enlargement of the body of the uterus, and to laxity of the vagina, (its generally acknowledged causes,) are not as one to ten compared with those in which it is

solely occasioned by inflammatory induration of the cervix uteri. In such cases, pessaries increase, by their pressure, the local irritation, and are generally themselves the source of sensations even more disagreeable and painful than those which they are destined to remedy.

As I have already stated, if the chronic hypertrophy is very slight, the abnormal weight of the engorged organ may not be sufficiently great to draw down the uterus, unless after great fatigue, and then only it is that the dragging lumbar and hypogastric pains of uterine prolapsus are experienced. In such cases, in the absence of ulceration or abundant leucorrhæal discharges, we are perhaps warranted in trusting to time, or at least in waiting, or trying mild measures, such as frictions with the iodide of potassium, and other solvents,—which have been recommended of late, but in which I have very little faith. If, however, we adopt this course, we must let the patient know that the uterine organs present in her a slightly morbid condition, which is susceptible of being aggravated by exertion of any kind. We must also caution her to apply at once for advice, should the symptoms under which she occa-

sionally labours, during menstruation, or after fatigue, become more intense or permanent, or should a leucorrhœal discharge set in.

The above rules apply more especially to the treatment of females labouring under very slight partial induration and hypertrophy of the cervix uteri, the result of antecedent disease, without ulceration or much leucorrhœa, when they first apply for advice. With them we may hesitate to put in force an energetic treatment at first, in order to cure an affection from which they experience but little inconvenience, and which the progress of age may modify. But we should never restore to society as cured a patient labouring under chronic induration of the cervix, however slight, whose case we have had the management of, or hesitate to apply the proper treatment when prolapsus exists to any extent, and the symptoms are severe. It is our duty to follow up the treatment, and to cure the disease *entirely*, if possible. That it *is* possible, I hope now to be able to prove to the complete satisfaction of my readers.

In order to modify effectually an engorged cervix, which has resisted all other modes of

treatment, the indurated organ must be deeply cauterized, either with the Vienna paste, (quick-lime and potassa fusa,) the plan adopted by M. Gendrin, or by the actual cautery, that followed by M. Jobert, (de Lamballe.) The eschar which forms, in either case, is much deeper than that which is created when the fluid caustics are used. The inflammation which accompanies its separation is also much more intense, and generally propagates itself to the entire cervix. The result is, that not only is the hypertrophied cervix diminished by the extent of the eschar which separates, but that the healthy inflammation set up in the chronically indurated tissues gradually melts them, as it were; so that often, on its subsiding, the hypertrophied cervix has regained its natural size. When this result is not obtained by the first cauterization, a second or a third seldom fails to reduce the uterine neck to its normal dimension. With the disappearance of the hypertrophy also disappear the symptoms which it occasioned; the uterus returns of itself to the position which it naturally occupies in the pelvis, and the cure is *really* accomplished.

If the Vienna paste is employed, the following

is the plan pursued by M. Gendrin, which I likewise follow. I must first, however, state that the Vienna paste, which is much used in France to produce deep eschars, is formed of equal parts of quicklime and hydrate of potassa, reduced to a fine powder, and intimately mixed. This powder should be prepared only when wanted, and kept in a glass-stoppered bottle. To be used, it is made into a paste, with a few drops of alcohol, and the paste is then spread over the part to be destroyed. Its action is very prompt, and neatly circumscribed to the part to which it is applied. A thin layer of the paste, for instance, will destroy the entire thickness of the skin in three or four minutes, and that with but little pain to the patient.

When applied to the uterine cervix, a large and conical speculum must first be introduced, and the engorged cervix made to enter its orifice; or should the cervix be too voluminous, the speculum must be firmly pressed on the part which it is intended to cauterize, great care being taken not to enclose between the rim of the speculum and the cervix a fold of the vagina. About as much of the paste as would cover a

fourpenny piece, a line in thickness, must be placed on a triangular piece of diachylon plaster, one end of which is inserted lightly in the cleft extremity of a small stick. The caustic paste is then carried, by means of the stick, to the cervix, and applied to the centre of the part comprised by the orifice of the speculum. With the long forceps, cotton is placed carefully all round the spot on which the caustic is applied, so as to completely protect the neighbouring parts; the stick having been withdrawn, the speculum is two-thirds filled with cotton or lint, which is firmly pressed against the uterine neck. The speculum is then extracted, the cotton which fills it being forcibly pushed back in the vagina with the forceps, as it is pulled away, so that the vagina remains thoroughly plugged. If all this is carefully done, it is impossible for the caustic to fuse, and to injure the parietes of the vagina. In about fifteen or twenty minutes, the cotton or lint must be gradually withdrawn by means of a bivalve speculum, and an eschar, of the size of a shilling, or rather larger, will be found where the caustic was applied. The vagina should then be washed

out with a little tepid water, complete rest in bed enjoined, and emollient injections employed until the separation of the eschar, which takes place from the sixth to the eighth or tenth day.

This mode of deeply cauterizing the cervix is attended with a little more perturbation of the system than superficial cauterization. Slight pain is sometimes felt at the time, but nothing of any consequence. Trifling hysterical symptoms are not unfrequent, but this I attribute more to the fear which the patient experiences than to any other cause. She sees that more importance is attached to the operation by her medical attendant than to superficial cauterization, and that unusual precautions are adopted, and is consequently often alarmed and agitated. The inflammation which accompanies the elimination of the eschar generally extends, as I have stated, to the entire cervix. Thence the symptoms of acute inflammation of the cervix. This inflammation may even extend to the uterus itself, and require to be treated by leeches to the hypogastrium, &c., but this is very seldom the case. In the immense majority of instances, the inflammation of the cervix is not sufficiently intense to require any other treatment

at the most, than emollient injections, poultices to the abdomen, and hip-baths.

During the three years I passed with M. Gendrin, at La Pitié, we cauterized at the least, in this way, one or two patients every fortnight, and I do not recollect having seen a severe case of metritis, or indeed any other serious result. M. Gendrin himself has, however, I believe, met with a few cases of intense metritis after thus cauterizing the cervix. Sometimes, on the separation of the eschar, hæmorrhage takes place. This hæmorrhage, however, is nearly always very slight; indeed, I have never known the loss of blood to amount to more than a few ounces. It may, however, M. Gendrin has told me, be more considerable. I am not aware, nevertheless, that he has ever found it sufficiently intense to require any particular treatment. Were such an untoward event to occur, the hæmorrhage might no doubt be easily overcome by injections with cold water, with a styptic solution, or, as a last resource, by plugging the vagina.—M. Gendrin's experience of this mode of treatment has been very great, and he has resorted to it for many years. He has had under his care, at La Pitié, during

the whole period, an uterine ward of nineteen beds, nearly always full of severe uterine cases.

M. Jobert arrives at the same result as M. Gendrin, by another means. He cauterizes deeply the uterine cervix by means of the potential cautery. To effect this, he uses an ivory conical speculum, in order to protect the neighbouring parts from the heat, ivory being a bad conductor of caloric. He then extinguishes, on the part of the cervix which he wishes to cauterize, one, two, or three olive-shaped cauteries, heated to whiteness, according to the depth to which he wishes to destroy the tissue of the cervix. A deep eschar is thus formed, as by cauterization with the Vienna paste. But little pain is experienced by the patient, and the eschar falls also from the sixth to the tenth day. Its elimination is likewise accompanied by considerable inflammatory reaction in the indurated cervix, which, generally speaking, rapidly diminishes, or melts under the influence of the revived inflammatory process.

Sometimes the effects of one cauterization suffice to bring the uterine neck to its natural size, sometimes two or more are necessary. M. Jobert does not confine cauterization with the potential cautery

to the chronic cases of inflammatory hypertrophy, which do not yield to other agents, but often uses it as a means of treating, from the onset, ulceration accompanied by inflammatory induration. In such patients, however, he applies it more superficially. His practice has been much found fault with in Paris, by some of his colleagues, but from ignorance only. I have had great opportunities of witnessing it, and can safely say that, although bold, it is both safe and successful. I was his house-surgeon during part of the year 1840, and during the whole of my two years' residence at Saint Louis, followed, more or less, his uterine practice without ever seeing any bad effects ensue. On the contrary, many patients who had been years suffering were rapidly cured by this treatment. My friend and colleague, M. Loreze, who was M. Jobert's house-surgeon for three years, states in his thesis, that M. Jobert has applied the actual cautery to the cervix in several hundred cases without a serious symptom occurring.

M. Jobert is the first surgeon who has regularly adopted cauterization with the potential cautery in the treatment of fungous ulceration and of chronic induration of the uterine cervix. Celsus

recommended ulcers of the prolapsed uterus to be cauterized with the actual cautery, and other surgeons have proposed the same means of treatment, as, for instance, Percy and Baron Larrey, who are quoted by M. Loreze. It does not appear, however, that these suggestions had ever been really carried into effect previous to M. Jobert's experiments.

This talented surgeon believes that cauterization with the potential cautery possesses peculiar advantages as compared with cauterization with the Vienna paste. But after enjoying extensive opportunities of judging the comparative value of the two methods, I have come to the conclusion that they are completely identical in their effects when properly used. M. Loreze, who may be considered to represent faithfully the opinions of M. Jobert, states that it is difficult to appreciate rigorously the depth to which the Vienna paste will disorganize the tissues of the uterine neck; that instead of exciting in the neighbouring parts a favourable reaction, it weakens the vital forces by a stupifying influence; that it is difficult to apply, and, in liquefying, runs on the parietes of the vagina, thus giving rise to extensive loss of

substance, which, on filling up, contracts the parts. To the two first propositions, I can give the most decided negative, and that from my own personal experience. A practitioner who is accustomed to the use of the caustic may measure, to a nicety, the extent of the eschar which he wishes to form by means of the paste, and if a very small quantity only be used at first, he will gradually and safely acquire that knowledge, even if previously ignorant of its effects. So far, on the other hand, from the action of the caustic on the surrounding parts being a stupifying one, I have *always* seen reaction take place most freely and with all the characters of healthy inflammation. As to the caustic running on the adjoining parts, such an accident is certainly possible in unskilful hands, but will never occur with a prudent, careful practitioner, who knows what he is about, and attends to the rules which I have laid down. Although my experience with it is considerable, I have never known the vagina even touched by the caustic. The same objection would also apply to the potential cautery, which I should be very sorry to see used for the cauterization of the cervix by any but a skilful practitioner.

M. Loreze subsequently states that on the separation of the eschar formed by the Vienna paste, which only takes place after a lengthened period, the exposed surface often assumes an unhealthy character. This assertion is also *totally* unfounded. I have always, on the contrary, seen the eschars formed by the caustic separate in as short a time as those produced by the actual cautery, and found the granulating surface underneath perfectly healthy. I have not, indeed, *once* seen an unhealthy sore follow cauterization with the Vienna paste, and am at a loss to discover how my former colleague can have adopted such extraordinary notions respecting this mode of cauterization; he certainly cannot have *seen* the caustic used. I should not have reproduced these views, were it not that they constitute the chief objections that have been urged against cauterization with the Vienna paste,—objections which, as I have already stated, I am able to refute from my own experience of its efficacy.

I may here remark that the length of time which elapses before the separation of the eschar depends, whatever the mode of cauterization, on the state of the parts cauterized, and on the depth

to which the cauterization is carried. When the eschar is superficial, it falls, necessarily, much more rapidly than when it is deep. If the potential cautery is used, the olive which terminates the instrument must be heated to a white heat, otherwise it might adhere to the tissues on being withdrawn, and the eschar might thus be torn away.

It has been repeatedly stated to me, that partial destruction of the tumefied cervix by cauterization must be attended with considerable subsequent danger, as, on the one hand, the orifice of the os uteri might become closed by the process of cicatrization, and as, on the other, there must be danger of rupture of the uterus during subsequent labour.

These objections are likewise altogether without foundation. The orifice of the os uteri is never obliterated or even contracted. There is a continued secretion of mucus issuing from the cavity of the uterus, which, along with the menstrual flux, keeps the orifice open under all circumstances. In several instances, when the induration has been very great, M. Gendrin has placed a small piece of solid potassa fusa within the lips

of the os uteri, so as to produce a very large eschar, comprising the tissues immediately round the os to a great extent, and that without the os being subsequently in the slightest degree modified. Neither is there any danger whatever of rupture of the lower part of the uterus during parturition in a woman who has undergone deep cauterization of the cervix; as must be evident on the slightest reflection. In hypertrophy and induration of the cervix, it is not the muscular structure of the organ,—which, in the normal state, is excessively scanty, as we have seen,—but the cellular structure, which is the seat of chronic tumefaction. Consequently,—as would be the case in inflammatory tumefaction and induration of cellular tissue in other parts of the body,—an eschar, although of apparently considerable size and depth, in reality scarcely attacks the proper tissue of the cervix. M. Gendrin, moreover, has repeatedly known his patients to become pregnant subsequently to deep cauterization of the cervix, even when it has been resorted to three or four times, and yet their labours have taken place without the slightest difficulty. Indeed, he very justly remarks, that the fact of the chronic hypertrophy of the cervix having been dissipated, must

tend very much to facilitate parturition, by rendering the dilatation of the os uteri easier.

As in superficial cauterization, deep cauterization of the cervix does not in any way interfere with menstruation, except inasmuch as it facilitates its occurrence by diminishing the state of uterine disease, which is the cause of the irregularities which I have stated generally to exist when the uterine neck is ulcerated or engorged. It is as well, however, to defer cauterization until after the menstrual flux, when the latter is expected, lest the uterine congestion should increase more than desirable the reaction that follows.

To sum up : I firmly believe that chronic induration and hypertrophy of the cervix uteri, the result of inflammation and ulceration, will often be found incurable by any other means than excision or deep cauterization. Excision ought, I believe, to be excluded, owing to the severe haemorrhage which follows, and the danger which consequently attends it. Deep cauterization being resorted to, I prefer, in most cases, the Vienna paste to the potential cautery, but merely because it alarms the patient less, and has less the appearance of a formidable operation. I have had

such extensive experience of both agents in the Paris hospitals, that I think myself fully warranted in stating, that in the hands of careful and intelligent practitioners there is no more danger in resorting to deep cauterization of the cervix than in performing any other of the minor operations of surgery. I have also seen so many miserable women, who had suffered for years under engorgement of the neck of the uterus, (some of whom had all along been under treatment,) relieved and cured by deep cauterization alone, that I have no hesitation in recommending its adoption to the attention of my professional brethren.

It must not, however, be forgotten, that cauterization of the cervix, as above described, is *an operation*, and, like *all* operations, surrounded with dangers ; that, consequently, it must neither be lightly undertaken nor lightly carried through.

The cases which I gave, in order to illustrate the pathology of this disease, are also good illustrations of the milder mode of treatment, that which is generally successful when chronic hypertrophy and induration have not set in.
(See Case.)

I will now relate the history of two or three females affected with chronic hypertrophy, and treated by deep cauterization, as illustrations of the more energetic treatment which is necessary in these cases.

CASES ILLUSTRATIVE OF DEEP CAUTERIZATION IN
CHRONIC INDURATION OF THE CERVIX.

CASE XVI.

Chronic hypertrophy and induration of the cervix.—Deep cauterization with Vienna paste.—Cure in four months.

On the 2nd of May, 1842, a young woman, named Fanny L——, aged twenty-three, wife of an upholsterer, residing in the Place du Carrousel, entered the Pitié under M. Gendrin. Of small stature, but rather full habit of body; she bore the traces of suffering in her countenance; her complexion was pale and rather sallow. She stated that she was married at the age of eighteen, and had two full-grown children in the first two years of her marriage. The first labour was natural and easy, the second was rather tedious,

and was followed by an attack of inflammation of the uterus, which obliged her to remain in bed nearly three weeks. She did not attempt to suckle her child. The menstrual flux did not return until three months after delivery, and was then accompanied by violent pains. From the time she left her bed after the illness which followed delivery, until her admission into the hospital, she was never free from hypogastric and lumbar pains, from bearing-down sensations, carried to such an extent as to render walking painful, and from leucorrhœal discharge. Six months after her confinement she applied to a medical practitioner for advice. He examined her, and stated that she was labouring under ulceration of the neck of the uterus. She was treated by him for several months, and at last dismissed as cured. The treatment consisted in superficial cauterization every week or ten days, hip-baths, rest on a sofa, &c. Although told she was cured, she still felt the bearing-down sensation and the lumbar pains; the leucorrhœal discharge also soon returned. In the course of the following year she applied to another medical man, was again told that she had ulceration and engorgement of the neck of the

womb, went through pretty nearly the same treatment as before, and was again dismissed as cured, although still suffering from prolapsed uterus. The old symptoms gradually returning, she applied to M. Gendrin, who admitted her into his service, where she came under my care, as I was then his house physician.

On examination by the toucher, I found the neck of the uterus as voluminous as a small egg, exceedingly hard and resistent, but perfectly smooth and equal, occupying the lower part of the vagina, within two inches of the external orifice. The os was open, and presented a soft velvety sensation. The vagina was lax, and appeared to have lost its natural contractility. Pressure on the engorged cervix was not painful. The finger on being withdrawn was slightly tinged with blood and muco pus, but the odour was not offensive. No increased heat of the parts. Not much retroversion. On examining with the speculum, the cervix was very soon reached, but was too voluminous to enter even into the largest conical speculum. Two thirds of its volume was formed by the anterior and superior lip. Around the os was an ulceration nearly the size of half a

crown, covered with muco pus. All the symptoms previously enumerated were present. Abundant leucorrhœal discharge, severe pain in the loins and hypogastrium, but principally in the former. Dragging and bearing-down sensation so severe that when she walked she said she felt as if the womb would fall out of the pelvis. As might be expected, after suffering so long, she was labouring under severe dyspeptic symptoms, palpitation, cephalalgia, constipation, loss of strength, &c.

She was ordered to remain permanently in bed, and eight leeches were applied to the cervix uteri; tepid hip-baths twice a day, and emollient injections three or four times a day were also prescribed. Light but nourishing diet; emollient enemata when required. The leeches bled profusely, and were re-applied four times, at an interval of six days. In the interval of each application the ulcerated surface was touched with the nitrate of silver.

Under the influence of this treatment, the lumbar and hypogastric pains rapidly diminished; as also the leucorrhœal discharge. On the 20th of June, the ulceration had nearly healed, and the size of the indurated cervix had diminished by

about one third. For some time previous, however, all further diminution in its volume had ceased. The surface had partly recovered its natural hue. No sensibility whatever on pressure. Texture still as hard and resistent as ever, perhaps more so. The entire uterus had risen considerably in the pelvis. As soon, however, as the patient began to walk, the hypertrophied cervix fell, dragging down the uterus, and gave rise to the old sensations of bearing down, although not to the same extent as on her admission. The general health was much improved. She had evidently arrived at the same condition as when dismissed as cured by her former medical attendants; in a shorter time, however, because, in all probability, the treatment had been rather more energetic, and more carefully followed up. At the same time, it was clear, that if discharged in this state, the prolapsus of the still indurated and hypertrophied cervix would soon become as great as ever, and bring with it a return of the local superficial inflammation and ulceration, so that in a few months she would again be in the same state as when the treatment began.

Under these circumstances, it was determined to resort to cauterization with the Vienna paste.

A small portion of the paste was therefore applied to the anterior lip of the engorged cervix, in the way described, and the vagina was plugged with lint. Twenty minutes afterwards I extracted the lint, and found that an eschar had formed, a little larger than a shilling. The vagina was washed out with tepid water, and the patient told to remain quiet. She experienced but little pain. On the sixth day, on examining by the toucher, the neck of the uterus was found rather hot and swollen. The inflammation which accompanied the elimination of the eschar had evidently propagated itself to the rest of the tissue of the cervix. On the 10th day the speculum was applied, and the eschar was found to have separated, leaving a circular ulceration covered with healthy granulations. The entire neck was voluminous and very red, rather sensible on pressure. The cervix gradually diminished from that time for a week or ten days, when it ceased to decrease in volume. Emollient injections only were used, and the artificial ulceration was slightly touched with the nitrate of silver once a week.

A month after the first cauterization, the cervix, which was considerably less in size, but still hypertrophied and indurated, was again cauterized

with the Vienna paste in the same manner, with a like result. Two months and a half after the first cauterization, and four months from her admission, she was discharged, perfectly cured.

The cervix uteri was not larger than in a healthy person, and presented no induration. The ulcerated surface was perfectly healed. The os uteri was quite free and open, the cicatrization having produced no obliteration or retraction. All pains had disappeared, as also the sensation of bearing down on walking, and the leucorrhœal discharge. The uterus had ascended in the pelvis to its natural position. The general health was also very greatly improved. Her two last menstrual periods had passed over without being attended with the usual pains, and the flow of blood was easy and abundant. She was, indeed, quite another woman.

CASE XVII.

Chronic induration of the uterine neck with syphilitic vegetations.—Cauterization with the Vienna paste.—Cure.

Julie Tonset, aged twenty-one, entered the Hôpital de la Pitié on the 20th October, 1842.

She had been delivered of a full-grown child a little more than three years previous. Shortly afterwards she contracted blennorrhagia, for which she was treated, during three months, at St. Lazare. She subsequently came to London, where she had two attacks of what was called by her medical attendants "intestinal inflammation," each of which lasted several weeks. She at that time experienced, she says, much pain in the abdominal lumbar, and inguinal regions—pain that was increased on standing or walking, and she had a leucorrhœal discharge. Six months previously, the menstruation, which had before been easy, became painful, and only lasted a day or two instead of several. Since then she had had an abundant leucorrhœal discharge, sometimes tinged with blood, and severe pains in the loins. She returned latterly to Paris, and consulted two physicians, who both told her that she was labouring under engorgement of the uterine neck. One said that it might kill her. Being dissatisfied with this opinion, she came for advice to La Pitié, which enjoys a great reputation for uterine disease.

On examination, she was found to present the

following symptoms :—Severe pains in the loins ; also in the groins and the inner side of the thighs. When standing, sensation of pelvic weight and bearing down. She feels the uterus fall when she walks, and the lumbar pains are then increased. Abundant purulent discharge from the vagina. *Toucher*: the uterine neck is rather voluminous and hard, slightly painful on pressure, and presents a soft, fungous, uneven surface. The finger is tinged with blood. The uterus itself is also rather voluminous and painful on pressure. *Speculum* : the uterine cervix does not enter the largest-sized speculum, and is deeply injected. On both lips it presents red prominent vegetations ; those of the under lip are the most considerable. There are several smaller ones on the vaginal mucous membrane, near its implantation on the cervix. These vegetations being considered syphilitical, the patient was put under a course of mercury. The hydrargyrum cum cretâ was the preparation administered. At the same time the vegetations were cauterized every fifth day with the nitrate of silver, emollient injections used three times a day, hip-baths twice a day ; poultices applied to

the abdomen, a light diet enforced, and the patient obliged to remain in a recumbent position.

Under the influence of this treatment the vegetations rapidly diminished, and in about a fortnight had disappeared, leaving, however, an ulcerated surface. The engorgement of the cervix remaining the same, leeches were applied two or three times, but without any result. It was then resolved to cauterize with the Vienna paste. The first cauterization took place on the 15th of November. It was repeated twice, on the 1st and 15th of December—that is, at a fortnight's interval. The indurated and hypertrophied cervix diminished in volume after each cauterization, under the influence of the eliminatory inflammation; and after the third, returned completely to its natural size and consistency. The orifice of the os remained perfectly free. At the same time all the other disagreeable symptoms had disappeared. The uterus had risen, along with the cervix, into its natural position in the pelvis; the local pains had entirely disappeared, as also the leucorrhœal discharge. The general health had also become completely renovated.

The above cases speak for themselves. In the first, the malady was evidently the result of the last labour, the one which was followed by metritis, four years previously. The practitioners to whom she applied, not being thoroughly acquainted with the pathology of the disease, thought that their patient was cured when the ulceration was healed, although the cervix uteri remained hypertrophied and indurated ; consequently, the organ continued prolapsed, and inflammation and ulceration of the mucous surface of the cervix soon again supervened. When I saw her, the induration of the uterine neck was evidently such as scarcely to be amenable to ordinary remedial agents. Deep cauterization, however, had the desired effect. Firstly, it diminished the engorged cervix by the extent of the tissues destroyed ; and, secondly, by reviving its vitality, and by giving rise to acute inflammation of the parts adjoining, it led to a partial resolution, or melting, of the indurated tissues. I firmly believe that no other plan except cauterization with the potential cautery, or excision, would have succeeded in this instance.

In the second case, the disease originated, most likely, either with the blennorrhagia, for which

she was treated at St. Lazare, or during one of her illnesses in London. These attacks, from the account she gave, were most likely attacks of metritis, and may either have been the cause or the result of the affection of the cervix. The disease was in a very chronic state when she applied at La Pitié for advice. Deep cauterization was equally successful in her case.

I shall now give a severe and very instructive case, treated by cauterization with the actual cautery, which I shall borrow from the thesis of M. Loreze.

CASE XVIII.

Fungous ulceration of the cervix uteri, the result of labours even years previously.—Cauterization with the red-hot cautery.—Cure.

On the 22nd of March, 1843, a young woman named Gorognet, aged twenty-seven, of lymphatic temperament, entered the Hospital St. Louis, under M. Jobert, for an affection of the uterine neck, under which she had been labouring fifteen

months, (says M. Loreze.) She was delivered of her only child at the age of twenty. The labour was natural, and three days afterwards she left her bed, to resume her usual occupations. She was nearly immediately seized with pain in the pelvis, violent colics, and fever. From this epoch she has always had a leucorrhœal discharge, and has often lost a little blood when making any effort. Sexual intercourse has also ever since been painful, and has been generally followed by the loss of a few drops of blood.

In September, 1842, she menstruated very abundantly. Subsequently, she was seized, she states, with "an inflammation of the abdomen," and was obliged to remain in bed three days. Since this period she has often been obliged to suspend her occupations, on account of the pains she experienced. On her admission into M. Jobert's wards, she presented the following symptoms :—General health deeply affected ; face pale ; body emaciated ; digestion difficult ; and every evening a febrile attack of several hours' duration ; little or no sleep ; pains in the loins, the groins, and the thighs ; heaviness near the anus ; habitual constipation ; constant leucorrhœa, sometimes

replaced by a flow of pure blood. The uterus is the seat of acute, glowing, lancinating pains. *Toucher*: considerable hypertrophy of the cervix, which is lobulated,* uneven, and bleeds with facility on the slightest touch. *Speculum*: the superior part of the vagina contains a quantity of muco-pus tinged with blood. The cervix, obliquely directed from left to right, is double the natural size, fungous, softened, varicose, especially the anterior lip, which presents a blue tinge, from the dilatation of its vessels. It offers a deep ulceration, occupying the entire anterior lip, the contour of the orifice, and part of the posterior lip. M. Jobert cauterized deeply the ulcerated surface with a red-hot olive-shaped cautery, (March 28.) The cauterization occasioned no pain. No accident occurred during the following days, only the leucorrhœal discharge became more abundant.

April 4th.—The eschar had just fallen. The patient was strictly enjoined to remain in bed.

* M. Loreze does not mention whether the lobules of the indurated cervix radiated from the os uteri, as I have stated that they do in *inflammatory* induration of the cervix, in contradistinction to carcinomatous induration; but I have no doubt that such was the case.

Narcotic injections were used, and pills of sub-carbonate of iron, along with a bitter decoction, given internally.

April 11th.—The uterine neck was found to have considerably diminished in volume; but still presented fungous granulations and a lobulated surface. The cauterization was repeated, as also on the 25th.

May 9th.—The ulceration was much less in size, as also the cervix itself. One of the three lobules which it presented had disappeared, and the other two were much smaller. The actual cautery was again employed.

May 16th.—The lobules had disappeared, and the ulceration had still further diminished in size. It was therefore cauterized with the acid nitrate of mercury, as also on the 23rd. On the 30th of the same month the nitrate of silver only was used.

On the 6th of June, the ulcerated surface was completely cicatrized, and the cervix had regained its natural consistency, form, and colour. The general health was re-established, and the patient left the hospital cured.

This case is another illustration to add to the one which I have already given (see p. 84) of the lobulated induration and ulceration of the cervix, of several years standing, accompanied by complete breaking up of the general health, emaciation, fever, flooding, &c., a form of disease which is no doubt occasionally mistaken for ulcerated cancer, even by sound, well-informed practitioners. The treatment adopted was completely successful, and that in a less time (two months and a half) than in the two former cases. This is, however, to be accounted for by the fact of antiphlogistics not having been tried, as they were in the other instance, deep cauterization having been resorted to from the onset. Considering the length of time during which the disease had lasted, and the fungous lobulated condition of the indurated cervix, such a course was perhaps judicious. My readers will, however, find, by referring to p. 84, that Elizabeth Droot, whose case was nearly, if not quite as bad, was cured in two months by a less energetic treatment. The cases in which the organ has remained the seat of acute inflammation, however severe, are not always the most difficult to cure.

It is stated by M. Loreze, that the disease of the uterine neck had only existed fifteen months. This is, I think, a mistake ; it is impossible to read the account which he gives of the state of his patient subsequently to her labour, seven years previously, without being convinced that the disease commenced immediately after her confinement, and persisted from that time until her admission into the hospital.

An important remark, with which I shall conclude this account of the treatment of inflammation, ulceration, and induration of the uterine neck, is the following :—In nearly all, and perhaps in all the cases which I have narrated, the females affected, although exposed to sexual intercourse, remained sterile during the entire duration of the disease ; in some, a period of many years. This is so generally the case, that we are, in my opinion, authorized to consider it the rule, and to conclude that when ulceration of the cervix exists in pregnant women, it has manifested itself subsequently to fecundation, and not anteriorly.

Inflammation and ulceration of the cervix may prevent fecundation in two ways — firstly, by

blocking up the entrance of the uterus; and secondly, by modifying the vitality of the uterine organs, so as to render fecundation and pregnancy difficult. The experience of the St. Lazare physicians, as we have seen, proves that when ulceration exists it is a frequent cause of abortion, a circumstance which would tend to strengthen the latter view.

There can be no doubt, also, that should impregnation take place in a female who presents a chronically indurated cervix, or should induration supervene during pregnancy, it must constitute a very serious obstacle to the dilatation of the os uteri during labour. Chronic inflammatory induration, indeed, is most likely one of the chief causes of that state of rigidity of the os uteri on which accoucheurs lay so much stress, and which they appear generally to consider as unconnected with disease of the cervix. This is a point which deserves to be carefully investigated. I have repeatedly been consulted by females half cured of inflammatory disease of the cervix, in whom that organ presented a degree of induration which could not but greatly interfere with parturition were they to become pregnant.

CHAPTER VIII.

ON THE TREATMENT OF SYPHILITICAL AND CANCEROUS ULCERATIONS OF THE UTERINE NECK.

I HAVE but little to say respecting the treatment of these forms of ulceration.

In chancre of the cervix uteri, the treatment is twofold; general and local. The general treatment must be conducted in the same manner as if the patient presented primary syphilitical symptoms in any other region; that is, some preparation of mercury must be administered. The local treatment, on the other hand, should consist in occasional cauterization of the ulceration with the acid nitrate of mercury, or any other caustic. Under the influence of this treatment, the ulceration rapidly heals. Should it leave chronic

induration of the cervix behind, the treatment would be the same as in inflammatory induration. As to the non-chancrous-looking ulcerations which so frequently coexist with the different forms of syphilis, and which, in my opinion, are nearly always inflammatory, the rules laid down for the treatment of inflammatory ulceration, &c., apply in full to them.

As I have already stated, I have hitherto always found cancers of the cervix uteri, whether ulcerated or not, incurable; like cancer in other parts of the economy. In other words, I have never seen an evidently cancerous tumour or ulceration of the cervix, respecting the existence and identity of which there was not a shadow of a doubt, cured—that is, dissolved, removed, either by local applications or by general treatment. I do not mean to assert the impossibility of such an event, but merely to state that I have never met with an instance of it, and, consequently, that I have no practical advice founded on my *own* experience to give with reference to the *curative* treatment of cancer. In the Hôpital de la Salpêtrière, in which I resided as house-physician during the year 1841, we had several wards always filled

with women labouring under cancer of the uterus, and I am not aware of a cure having ever taken place, or of the numerous attempts at treatment which were made by the medical officers having ever been crowned with success. They all sank successively into the grave, some rapidly, some slowly, as is the case in cancerous affections. It is true that they were all in an advanced state of ulcerated cancer when received into the hospital, being sent there as incurable from other hospitals.

With reference to amputation of the uterine neck in localized cancer of that organ, it is a subject which I need not here discuss. I will merely mention that the operation has been condemned by the profession generally, after mature discussion. The cases in which it has been performed successfully, are generally considered to have been merely cases of inflammatory induration of the cervix, such as those which I have described at pages 188 and 200, and with them deep cauterization is a much safer mode of treatment. Even were it possible to amputate the cancerous cervix uteri, without danger, which it would appear is not the case, the removal of the diseased

part, as in other parts of the body, is merely a questionable palliative remedy.

Although I thus profess to place little or no reliance on the success of extirpation of the cancerous cervix, yet I do not mean to say that its destruction ought never to be attempted in cancerous degeneration. Should the disease be fairly recognised in its first stage, and should it be evidently confined to the cervix, the morbid tissues may rationally be destroyed, either with the potential cautery or the Vienna paste. The cervix uteri being nearly insensible, there can be no serious objection to adopting this course, however problematical the success which may follow it. I have heard M. Jobert state, that he has successfully destroyed, with the actual cautery, tubercles of the cervix which he believed to be cancerous, and that, after amputation had been already resorted to. The disease had returned, as it most likely would, even after M. Jobert's operation. The patient who was treated in the hospital was, I believe, lost sight of after her discharge.

If little can be done to effect a cure, much may be done to retard the progress of the dis-

ease, to render it stationary, or to alleviate the extreme anguish which the unfortunate patients generally suffer; more, perhaps, than in any other form of cancer. For the means by which this end is to be obtained I must refer my readers to those works which treat at length of uterine cancer, merely stating, in a general way, that they consist in great attention to the general health, to the diet,—which should be as nourishing as possible,—in extreme care to keep up the cleanliness of the suppurating parts—an indication attainable by frequent injections—and in the judicious general and local use of narcotics. It is surprising how great a change an intelligent practitioner may produce in the state of a patient, apparently at death's door, by these means. The change is, indeed, often so great as to render it difficult to persuade the relations that the patient is not rapidly recovering.

It is necessary, however, to be very cautious in our prognosis, as women labouring under uterine cancer are subject to sudden relapses, or crises, which may modify their state from day to day in the most extraordinary manner; especially at the period of menstruation,

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should they still be menstruated. As we may anticipate the occurrence of these occasional changes, it is very advisable to take advantage of any improvement in the general state, to diminish the dose of the narcotics administered, or even to suspend their use entirely, if possible. By so doing we leave ourselves resources when they are required, and contribute also to the general amelioration of the health. As sedatives and narcotics may be termed a double-edged sword, I generally vary the agents which I employ, in order to prevent the patient becoming habituated to their action, and in order to obviate the necessity of administering them in large doses.

THE END.

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